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THE PHYSICIAN'S RESPONSIBILITY IN THE REDUCTION OF THE CANCER MORTALITY.*

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NEW ORLEANS.

I have been wondering lately whether I am seeing an unusual amount of malignant disease, whether my cases represent more advanced types or more virulent types of cancer than other surgeons are seeing, whether my disheartening record of suffering and death is unique. I question, however, whether I differ from other physicians in any of these particulars, though I know that the sum total of disaster has forced itself upon my consciousness, and I have asked myself in all seriousness wherein lies the fault. For I do not deceive myself; there are men and women in their graves today who, if they had been wiser and if their physicians had been wiser and if I, their surgeon, had been wiser, would still be living and well and useful. Whose is the responsibility for this fearful wastage of human life?

I have tried to answer my own question by a study of my own records and I find in them much food for very sorrowful thought. Let me illustrate. Carcinoma of the large bowel is usually of a low grade of malignancy and remains amenable to surgery long after carcinomatous growths in other locations have already metastasized. Yet last fall I operated upon a man with inoperable carcinoma of the rectosigmoid junction who had been treated, so his physician wrote me, with salvarsan over a long period of time because it was hoped, in spite of his negative Wassermann, that his definitely palpable rectal growth might be syphilitic. I performed a colostomy on him and I give him until midsummer to live. The appendix is admittedly one of the most favorable locations in which malignancy can occur, yet last month I operated on a man with a generalized peritoneal carcinomatosis of appendiceal origin, who had been treated medically for indigestion for a year and a half. I could do nothing for him, and I have just heard of his death.

Last December I performed a permanent colostomy on a physician, again for inoperable carcinoma of the rectum, who had permitted himself to be treated for months for amebic dysentery, though the parasite had never been identified in the stools. I daily expect word of his death. A few years ago I did a radical breast amputation on a brilliant young physician who knew for a full twelve months before she consulted me that she had a suspicious mass in her breast and who delayed operation for another six months after I had seen her and had told her frankly of her condition; she died eighteen months later, with as widespread a metastasis as I have ever seen.

I have just been told of a young woman, well educated, intelligent, with a background of millions, who had suspected to the degree of certainty for more than two years that she had a cancer of the breast, but who, because she did not want an

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operation, permitted her disease to be discovered only a week before it killed her. The tale was told to me by a woman, also of intelligence far beyond the average, who seemed in no wise appalled by this wicked and senseless sacrifice; her tone throughout was one of admiration for the stoicism with which her friend had borne what I grant must have been extreme mental and physical anguish, and no words of mine could convince her of the folly of the whole performance or persuade her that she had witnessed a spectacle in all respects akin to suicide.

It is an incredible story, of course, and yet how can we blame the public for its blindness when we of the profession are equally blind? This young woman killed herself, but in the other cases I have quoted—I speak very bluntly—did not the physicians kill their patients, did not the physicians kill themselves by the treatment which they undertook on their patients and which they permitted to be undertaken on themselves? They were finally my surgical cases, and I have no desire to be self-righteous, but I hold myself in no wise primarily responsible for their deaths, or for the deaths of dozens of men and women like them whom it has been my unhappy lot to treat.

Part of the cancer mortality is, with the limitations of our present knowledge, beyond human control. Part of the cancer mortality, a large part of it, is unquestionably due to the fear and ignorance of the public who are our patients. But is not a large part of it the responsibility of the medical profession? An increasing number of people are seeking medical advice promptly for conditions which they suspect to be precancerous or cancerous, and as a result, a tremendous responsibility rests upon the physician who undertakes the management of such cases, for upon his diagnosis, at a time when a cure is frequently to be hoped for but diagnosis is frequently difficult, rest the issues of life and death. You and I know in how very many cases that responsibility is not being adequately met.

The first reason is that the physician often does not put into use a fact which he usually knows full well, that the clinical signs of early malignancy, no matter in what organ or part the disease appears, do not differ from the manifestations of other non-malignant diseases in the same organ or part. So he dismisses his patient after a cursory study, with a salve for the unhealed sore, with douches for the metrorrhagia, with pills for the indigestion, with laxatives for the constipation or bismuth for the diarrhea. He is consigning these unfortunate men and women to death just as surely as if he had given them doses of deadly poison.

The only safe rule for the physician to follow is to consider as cancer until it is definitely proved not to be cancer any stubborn surface lesion, any perversion of function, any change in the previous norm, any irregularity or disturbance of any sort which occurs in persons within the cancer age. And that age, let me remind you, begins considerably earlier in life than many of us are wont to consider that it begins. A change in a woman's menstrual habit is always of grave import. Digestive symptoms which do not yield promptly and permanently to simple remedies demand detailed investigation. A variation in bowel function, no matter how it is evidenced, suggests carcinoma, and if it is accompanied by anemia, malignancy of the right half of the colon can be very strongly suspected.

Every physician knows the importance of not overlooking these and similar symptoms, yet many physicians, as every surgeon knows from bitter experience, do not use their knowledge. They temporize and hesitate, and, most important of all, they do not employ the only infallible method of ascertaining beyond shadow of doubt that a condition is malignant or that it is not. Cancer in this day is a microscopic fact, and the clinical rules by

which our forefathers diagnosed malignancy should be thrown into the discard, and the entire emphasis placed upon the truth that the laboratory reveals. The certainty of clinical diagnosis, as Moynihan well says, is the certainty of death, and Bloodgood's point is equally well taken, that the early microscopic picture differs in every detail from the microscopic picture of the terminal phenomena, which, unfortunately, is the picture that most text-books paint.

A properly performed biopsy is the only absolutely dependable method of diagnosing the early case of malignancy, which is, at one and the same time, both the doubtful case and the curable case. Biopsy is better than the most detailed history, better than the most careful physical examination, better than the most elaborate chemical studies, better even than the evidence of the roentgen-ray. It is the final word in accuracy of diagnosis, and its negative value is quite as great as its positive value: to proceed to radical treatment, with its inevitable mortality and morbidity and its frequent ablation of function, without indisputable evidence that malignancy is present, is almost as criminal as to fail to diagnose the malignancy at all.

Biopsy should be done even if it necessitates preliminary surgery to accomplish it. Thus, curettage is the only safe way to eliminate uterine malignancy, and, much as I appreciate the scholarly work that Sampson has done, I hope that his point as to the danger of this procedure, the possibility of disseminating the cancer cells into the peritoneal cavity, will never be generally regarded; if it is, I feel convinced that the death rate from uterine cancer will be considerably higher than it is at present. The Mayo Clinic has the highest percentage of cures on record for carcinoma of the stomach, though I would remind you that the results of such a clinic are not nearly as important, in the last analysis, as your individual results and mine, for you and I and other single surgeons do more operations in the aggregate than does the staff of the Mayo Clinic. I pay tribute to the surpassing skill of the Rochester surgeons, but I pay a deeper tribute to their wisdom in exploring promptly every patient in whom they do not find a definite reason for his digestive symptoms. Only thus can cures be accomplished.

Biopsy is a safe procedure, but there is a right and a wrong way of doing it. The tissues must be handled with the utmost gentleness if dissemination of the malignant cells is to be avoided. For the sake of the pathologist—the need of a competent one is so obvious that I refrain from comment on this point—the growth should always be excised with the knife rather than with the cautery, which distorts the true histologic picture, though the cautery should always be used to seal the incised area. The section, if the growth cannot be removed in toto, should be taken from the center of the suspected area and should be of sufficient size to permit of adequate examination. Finally, in doubtful cases, the diagnosis should be made by frozen section, and, if it can be made immediately, as it usually can be, the entire operation should be done in one stage, for the deferred radical operation carries an unquestioned additional risk.

Complete surgical excision, though it is not always either possible or practical, is the ideal treatment for carcinoma, and it is a pity that it is not considered emergency surgery, for none of us can know the moment when the borderline of safety is passed, though we know that it is passed very early. J. B. Carnett says somewhere that when he detects a lump in a woman's breast, he takes her to the hospital immediately in his own automobile, and there he excises it and studies it without a moment's loss of time. He may alarm his patients, but I have no doubt that he has thus saved many lives.

There must, however, be a proper conception of the surgery of cancer, and there very frequently is not. Mere excision is not enough, even wide excision is not enough.

The surgery of cancer, as Moynihan points out, is not the surgery of the organs, it is the surgery of the lymphatic and glandular systems, and no other variety demands more knowledge and more skill. Eight years ago I performed a radical breast amputation on a woman who, though she is now dying, has lived for eight years, six of them in perfect comfort. A few years ago her sister developed the same disease, and was dead within nine months after the performance of a simple mammectomy. I have been shocked on at least two occasions to find in the records of operations done for unquestioned cervical malignancy the statement that only the lower two-thirds of the cervix was amputated because the malignant growth had not extended beyond that area. The men who performed those operations knew nothing of anatomy, nothing of pathology, nothing of the routes by which cancer extends, and no man has a right to undertake the surgery of cancer unless he comprehends perfectly all of these things and unless he is able to do radical surgery with as much safety as radical surgery can be done.

But surgery, as we have said, is neither possible nor wise in all cases. It is now generally accepted that in carcinoma of the cervix uteri, even of the early variety, irradiation gives generally better results. In advanced cases of malignancy the patient's lot is often happier if radical measures are withheld and only palliative treatment employed. Finally, the patient who needs a mutilating operation had best be left to die in his own fashion, for no surgery can help him. This is particularly true of carcinoma of the oral cavity. The application of radium with the simultaneous ligation of the external carotid artery will sometimes arrest the malignant process for many months, but a mutilating operation, if it does not precipitate a fatal outcome, inevitably hastens the end, and in the interim the patient is a nightmare to himself and to his associates.

There is no specific cure for cancer and there probably will not be until its specific cause is discovered, but that does not prevent the announcement at intervals by lay people who know nothing, and by physicians who should know better, that such a cure has been found. We have recently witnessed such a premature announcement from the Pacific Coast, and the tragically hopeful and doomed victims who have dragged themselves across the Continent have found exactly what similar victims have found in similar quests, that they were following wandering fires. Yet how can we blame ignorant people for grasping at any thread of hope, for believing that the cure for cancer has been found, when presumably intelligent physicians have apparently accepted the claims, complacently forgetting that the chief criterion of a cancer cure, the lapse of a specified number of years, cannot possibly be met in a period of a few months. I have been astonished at the number of physicians who have written me, suggesting that patients whom they had referred to me and upon whom I had been obliged to pronounce a death sentence, should take the Coffey-Humber treatment. The proponents of the method have stated repeatedly that they have never said or implied that they have found a cure for cancer, and the merits of the treatment are now thoroughly disproved, but at that, its authors have just as much to be responsible for in the ill-advised publication of their human experiments while they were still without shadow of proof as were the physicians who half a dozen years ago cruelly held out to the victims of cancer the hope of relief by the now entirely discredited Koch cure.

These are old ideas, I grant, but I have felt justified in emphasizing them again because I know from a sad personal experience how completely they are being disregarded. Cancer is the King of Terrors, cancer is the Captain of the Men of Death, and until we know its specific cause it seems unlikely that we can conquer it. We

can, however, reduce its mortality appreciably by the routine use of certain procedures, biopsy in every doubtful case, the prompt and proper surgery when once the diagnosis has been made, and the unqualified condemnation of every cancer cure which has not proved by at least five years of trial that it is anything but another vain and cruel delusion.

PREGNANCY OR FIBROIDS.*

P. GRAFFAGNINO, M. D.

NEW ORLEANS.

Let me emphasize the fact that I do not recommend operation for diagnosis in cases of doubt between fibroids and pregnancy, for it is the mark of an obstetrician or gynecologist of experience to make a diagnosis before operation.

Modern scientific methods have made diagnosis more precise and recently has favored us by newer pregnancy tests. In all doubtful cases one must resort to:

1. Time element—this is sure if there is no urgency in arriving at a conclusion; no known tumor grows as rapidly as the pregnant uterus.
2. Roentgen-ray — the technic is now improved and is most valuable. Many authorities claim that differential diagnosis is possible as early as the sixth week.
3. Tests of precision:
   a. Ascheim-Zondek; depends on the quantity of anterior pituitary hormone in the urine of pregnant women. When injected into immature mice it causes demonstrable changes in the ovaries.
   b. Frank female sex hormone test; depends on the presence of the female sex hormone in the whole urine of pregnant women; when injected into castrated white mice causes changes in the vaginal spread.
   c. Siddall test; depends on the effect of anterior pituitary hormone in the blood serum of pregnant women in the vaginal tract of immature mice.

Mazer and Hoffman[1] report that the female sex hormone test is the more reliable when positive, in that the proportion of error in non-pregnant women is less than 4 per cent. They say, however, that each test performed individually renders a positive reaction in 75 per cent of early pregnancies; when combined, the percentages, of positives is increased to 90 per cent by virtue of one of the three tests showing a positive reaction. A negative finding does not exclude the possibility of pregnancy. One can therefore see that even these tests are fallable.

If, however, after all these tests the diagnosis is still doubtful and the abdomen has been opened, I believe that a definite diagnosis can be made by especially noting the position of the round ligament and also that of the tubes and the suspensary ligament of the ovary. Failure to note this point has made the differential diagnosis very difficult, as can be attested to by any gynecologist or general surgeon of experience. Let me quote from various text books on gynecology and obstetrics:

DeLee[2]: "The differential diagnosis between large symmetrical interstitial fibroids and pregnancy is sometimes one of the most difficult to make. Times innumerable the belly has been opened and only the normal pregnant uterus has been found and, indeed, it may be almost impossible to distinguish the two even after the tumor is out of the belly in the hands of the operator."

Lynch[3]: "Uterine pregnancy advanced as far as the fifth month may offer the greatest difficulty in differential diagnosis. Cases are often operated as tumors and the true diagnosis obtained only when the abdomen is opened. Occasionally even when the abdomen is opened one may be most uncertain as to the nature of the growth, especially when it has be differentiated from a two or three months pregnancy. Even with growths of larger size the surgeon may

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be convinced that he is feeling the outlines of a fetus. There is no surgeon of experience who has not had cases which proved to be most confusing."

Bland[4]: "A solitary edematous soft or cystic interstitial or submucous myoma of moderate size resembles very strikingly an early gestation, and the differentiation of the two conditions is sometimes exceedingly difficult or even impossible. In every questionable case the time factor should be taken advantage of and this will usually tell the tale. It is far better to do this, allowing a few months to observe whether any uterine changes occur rather than experience the chagrin and mortification not to mention the distress, disappointment and loss of confidence on the part of the patient, of opening the abdomen to find a pregnant uterus. Most men with an extensive gynecological practice have had this unhappy experience."

Graves[5]: "The diagnosis between pregnancy and myomatous uterus is sometimes exceedingly difficult and may lead to a disastrous procedure. A symmetrical edematous myoma may resemble a pregnant uterus very closely indeed."

C. C. Norris[6]: "The differential diagnosis between myomata and pregnancy may be

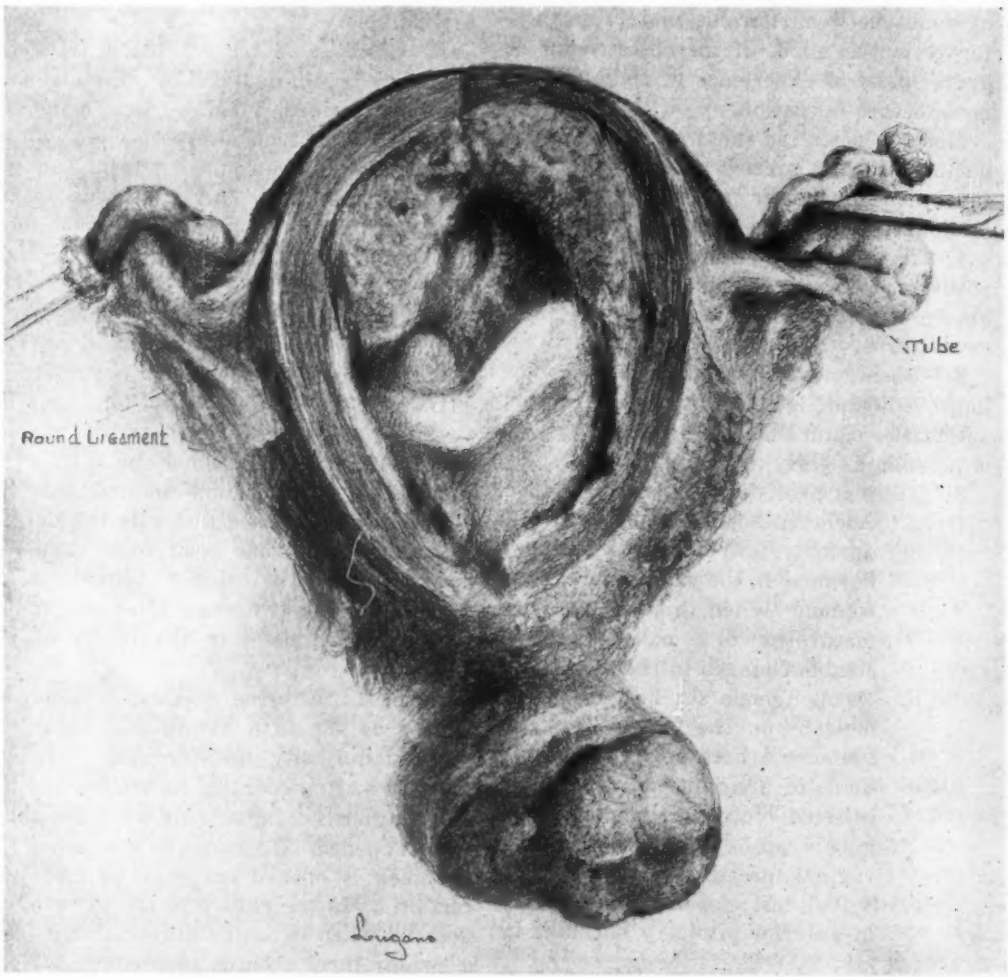

FIGURE 1. PREGNANGY

difficult. Even after the abdomen is opened some doubt may still exist. A single softened myoma is especially likely to simulate pregnancy."

In pregnancy the greatest development is in the fundal part of the uterus.

Williams[7]: "The enlargement of the uterus is not symmetrical, but is most marked in the fundal region. This can readily be appreciated by observing the relative positions of the insertions of the tubes and ovarian ligaments, which in the early months of pregnancy are almost on a level with the fundus; whereas in the later months their attachments are found at points slightly above the middle of the organ."

In fibroids the gross anatomy is entirely different. The fibroid arises from the middle coat of the uterus at or near blood vessels; it then spreads outward, downward, upward and laterally. As it grows, it displaces uterine tissues above it in these same directions, *i. e.* outward, etc., so that the relation of the round ligament to the body of the uterus is invariably disturbed, but the relation of one ligament to the other is maintained, that is, the distance between the ligaments is the same, for the tumor comes from underneath.

First mention of this fact, namely, the relation of the round ligament, ovaries and tubes in fibroids, as far as I ascertain, in the English literature was made by Kelly and Cullen[8] in 1909. They

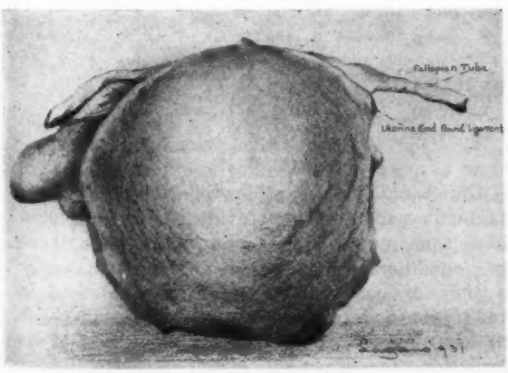

FIGURE 2. UTERINE LEIOMYOMA.

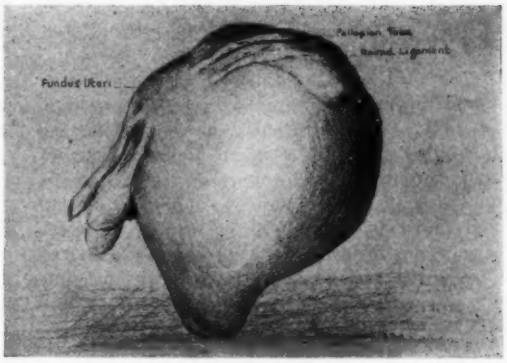

FIGURE 3. LEIOMYOMA.

say "Altered relation of one round ligament, to its fellow—The relation of the ends of the round ligaments to one another is often an important point in the diagnosis between pregnancy and myoma. In some cases, on opening the abdomen, the surgeon, from the general contour of the uterus cannot exclude pregnancy, although the clinical history in no way suggests it. Often a glance at the uterine insertion of the round ligaments will show that they are not over a few centimeters apart, although the uterus is as large as that of a six months' pregnancy. This will usually indicate that the enlargement is due to a tumor situated in the posterior wall. When pregnancy exists, there is usually an equable enlargement of the uterus, and although the distance between the round ligaments increases their points of uterine attachments remain on the same level." C. C. Norris[6]: is the only other writer that mentions this. He alludes to it in a short sentence:—"The round ligaments are especially prone to be asymmetrical and abnormal in location in the case of a tumor."

I, therefore, place great weight and importance on this differential diagnostic point and I think that fewer mistakes will be made in the 'open belly' if it is utilized. For the past fifteen years I have adhered to this sign which was first brought to my attention by the late Doctor Michinard and I have benefited by it.

Let me bring to your attention two cases that would have escaped a useless second

operation had this been borne in mind or known:

ILLUSTRATIVE CASES.

Dr. A. D. Bevan[9] of Chicago reported a case of fibroid simulating pregnancy. A young woman of 30 years, a school teacher, came to his service with a large abdominal tumor. She was seen, in consultation with an obstetrician, and diagnosed fibroid tumor. The woman was not married and denied on questioning any possibility of pregnancy. The obstetric colleague was present at the operation and when the tumor was brought into view said, "Bevan that is a pregnancy and you must close the abdomen and let her go to term." The uterine mass was one that was absolutely consistent with being a pregnancy of about seven or eight months. The abdomen was closed. The patient was told the next day by Bevan and the obstetrician she had a pregnancy. She was indignant, stating with great emphasis that there was no possibility of her being pregnant. Bevan, therefore, insisted that she be kept under observation for three months and was very much surprised when she returned at the end of this time.

At the second operation he had this obstetric colleague and another obstetrician of some note who was quite positive, when the abdomen was opened that it was a pregnant uterus. However Bevan did a hysterectomy and turning the operation over to an assistant, the three, somewhat uncertain of the possibility, divided the uterus and found a fibroid.

B. More recently in this city a case was brought to my attention:

The positive points in the history are: Mrs. J. V., white, married and 41 years of age. Menstruations had been normal until December 1929 at which time she began to lose small quantities of blood for the next two months. She had three children living and well.

In February she consulted her doctor who advised her to be operated for a 'uterine tumor.' Accordingly, in April 1930, her abdomen was opened and much confusion existed—was it a pregnancy or was it just a fibroid? Deciding that it was a pregnancy, the abdomen was closed. Questioning the patient and her husband separately, they both denied that there could be any possibility of pregnancy.

Six weeks later on the insistence of the husband, the patient was again operated upon. At this operation, the assistant was one to whom I had imparted the information concerning the position of the round ligaments in the differential diagnosis of pregnancy and fibroids. Seeing that the round ligaments were to the sides and widely separated, he declared that it was a pregnancy, The uterus however was removed and on dividing it a four and one-half months fetus was found.

CONCLUSIONS.

1. Diagnosis before operation is always to be desired.

2. Utilize the various new tests of presision in pregnancy.

3. When the abdomen is opened and confusion as to diagnosis between pregnancy and fibroid exists, utilize the sign of the round ligaments, suspensary ligaments of the ovary and tubes.

4. In fibroids the distance between the round ligaments, suspensary ligaments of the ovary and the tubes, is not increased and they 'ride' on top of the uterus. They are asymmetrical and abnormal in location.

5. In pregnancy the round ligaments are to the side, equable, and the distance between them is greatly increased.

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DISCUSSION.

Dr. A. J. Thomas, (Shreveport): Dr. Graffagnion's paper makes it evident that we should have some way of differentiating between these two conditions before operation, and at as early a time as possible. I believe that method is radiologic, and I began my work by accident. A patient was referred to me for a question of irradiation, the diagnosis lying between fibroids and carcinoma. She was 52 years of age, and

malignancy was suspected. Surgical treatment was finally decided upon, and the excised specimen showed, in addition to the fibroids, a four and a half months fetus.

(At this point Dr. Thomas exhibited slides showing pregnancies at various stages from four and a half months down to six weeks, and pointed out the methods of differentiating the fetal structures.)

When I began to interest myself in this subject, I found that by the development of a special technic it was possible to depict pregnancy at an earlier and earlier date, and I have radiograms visualizing the ovem as early as the sixth week.

Dr. H. V. Sims (New Orleans): I wish to begin by recommending that Dr. Thomas' slides, which he has just demonstrated, be followed by a view of his original roentgengrams, for the details are brought out more remarkably than on the slides. He has undoubtedly worked out a technic of great value, and we shall look for results from it.

I always ask my students to name for me the most common tumor which is found in women, and I am always gratified when they realize that pregnancy is the answer to that question. If we all remembered that fact, we should have fewer incorrect gynecologic diagnoses. Pregnancy is usually unsuspected in connection with fibroids, it is often found when the uterus is opened after operation or is reported from the laboratory, and it is usually very early. The combination undoubtedly makes diagnosis difficult, and if operation is done by mistake, the point made by Dr. Graffagnino, the uniform insertion of the round ligaments, is of the greatest value in the differential diagnosis. The uniform enlargement of the uterus, its consistency and its bluish discoloration can all be present with fibroids, but the uniform insertion of the round ligaments is unique. With the development of the Aschheim-Zondek test and with the radiologic technic devised by Dr. Thomas, we shall have diagnosis much simplified in the future, I am sure. The difficult cases are the early cases, few of us can be misled in the later months.

When pregnancy is definitely diagnosed in connection with fibroids, a fresh problem is introduced, how to manage it. Each case must be handled individually, but generally speaking, I would say that interference before term is never indicated unless hemorrhage, pain or fever forces our hand.

At the time of delivery individualization is again necessary. Can the patient deliver spontaneously? Is a test of labor warranted? If surgical delivery is indicated, shall myomectomy or hysterectomy be done? The age of the patient and the number of previous children have much to do with the decision, for the problem of the woman of twenty and the problem of the woman of forty are essentially different.

Dr. E. L. King: The history in the case of pregnancy coincident with fibroids is often misleading. I have in mind a case in which the amenorrhea of pregnancy was masked by the menorrhagia of fibroids and the balance was struck in scanty menstruation which completely clouded the diagnosis until the abdomen was opened. Other signs and symptoms may be present in these cases, but the picture is always confusing.

The Aschheim-Zondek test, based on the finding of the pituitary hormone, or rather of one of the pituitary hormones, in the urine, is proving of very great value. It originally required a half dozen immature female rats, not weighing over 8 grams, and took 100 hours, but Schneider has recently reported that it can be successfully performed in 24 hours, using one or two immature rabbits 12 or 14 weeks old. The urine is simply filtered, not sterilized, and is injected into the ear vein of the rabbit, in quantities of 10 c.c. Within 24 hours there are definite hemorrhagic areas in the ovaries, clear enough to be seen with the naked eye and exellently demonstrated with a hand glass. His result are 100 per cent correct, but it remains to be seen whether they will be duplicated by others. If they can be, we have an excellent, simple and reliable test which will certainly be the standard diagnostic measure of the future in this particular problem.

Dr. Adolph Jacobs (New Orleans): Let us assume that all possible tests for pregnancy have been made and have been inconclusive. What possible reason would there be in the average case for surgical intervention immediately? The solution of the problem is to wait and to observe the patient, for if the patient is pregnant, the roentgen-ray will make the diagnosis for us in the fifth month, and in the average case there is no reason why we should not wait for it.

Dr. Hilliard E. Miller: I recently saw at the Mayo Clinic a most convincing demonstration of the value of the Aschheim-Zondek test. More than a dozen rabbits were autopsied after the injection of urine from supposedly pregnant women, and the results were positive in 94 per cent of the cases. The technic is very simple. It is most important to see that the immature female rabbits are isolated, so that there is no chance of intercourse, for rabbits ovulate only after coitus. Within 24 hours the changes described by Dr. King had occurred, and autopsy showed ovarian hemorrhagic areas which needed no magnifying glass to demonstrate them. Similar autopsies in control rabbits showed no changes at all, and my own opinion from this demonstra-

tion is that the problem of the diagnosis of early pregnancy has been solved.

Dr. Joseph Cohen (New Orleans): In 1922, at the New Orleans Charity Hospital, I saw the late Dr. Henry Cocram meet the problem of fibroids or pregnancy in the course of an operation in which the diagnosis was not clear. Even the point brought out by Dr. Graffagnino, of the insertion of the round ligaments, did not settle the question. He took an aspirating syringe, stuck it into the uterus, and examined the fluid which he withdrew from the mass, which, I should have said, obviously contained fluid. Upon examination he decided it was amniotic fluid, and the diagnosis was confirmed when the patient was delivered some months later. I mention this method of differentiation as applicable to the occasional case.

Dr. P. Graffagnino (Closing): With the many new tests we have at our command there seems little excuse today for operating to decide the question of pregnancy or fibroids, but the matter was not so simple some years ago. The young man entering medicine today has advantages we did not have, and my paper is based on my own experiences in former days. The tests for pregnancy now are nearly 100 per cent positive.

My chief reason for writing this paper was to emphasize this matter of the insertion of the round ligaments which was mentioned in 1909 and scarcely mentioned again in any text written prior to 1930. The uniform insertion of the round ligaments is almost pathognomonic of pregnancy when the abdomen is opened and the diagnosis is still not clear.

CHRONIC CUTANEOUS ULCERATION OF THE LOWER EXTREMITIES.*

ALTON OCHSNER, M. D.,†

NEW ORLEANS.

Chronic cutaneous ulceration of the lower extremities occupies a unique position in the practice of medicine in that in the past it has been one of the most difficult conditions which surgeons and general practitioners have been called upon to treat. Every physician, both during his medical school training and subsequently, has been impressed with the fact that the therapeutic results obtained in cases of "chronic leg ulcer" have been less satisfactory than those obtained in other conditions. Chronic ulcers of the extremity undoubtedly occur more frequently among the poorer classes and, therefore, are seen in larger numbers in those institutions where the indigent are cared for. The condition does, however, occur frequently enough in private practice and even among the better class of patients that it behooves every physician to be familiar with the clinical entities.

The failure to obtain better results in the majority of patients with "chronic leg ulcer" is undoubtedly due to the fact that the attending physician's attention is directed primarily toward the manifest lesion without realizing that the ulcer of which the patient complains is merely a symptom and not a disease entity in itself. This assumption is well borne out by the frequency with which a diagnosis of "chronic leg ulcer" (ulcer cruris) is made in outpatient and hospital records. A diagnosis of "fever" in hospital records would be equally accurate, and yet no one, except in those cases in which the pyrexia is of unknown origin, would be satisfied with such an inexact diagnosis. Obviously, unless the underlying pathologic lesion which is responsible for the cutaneous ulcer is well understood, few or no results can be expected from the average type of treatment. However, if a correct diagnosis is made and the underlying pathologic process corrected, healing of the ulcer will almost invariably result.

Chronic cutaneous ulcers of the lower extremity may be classified as follows: 1, varicose ulcers; 2, syphilitic ulcers; 3, sickle cell anemia; 4, mycotic ulcers; 5, tuberculous ulcers, and 6, trophic ulcers.

VARICOSE ULCERS

Undoubtedly the most frequent ulcer of the lower extremity is that which is associated with varicose veins. According to Thomas[1] approximately 90 per cent of all patients suffering from "chronic leg ulcers" have the varicose type of ulcer.

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This percentage, which may be correct in the University of Pennsylvania clinics, is certainly not a correct one in the Southern States, where a large negro population is present and in which a relatively higher proportion of syphilitic ulcers exist. Deville[2] found that among the patients presenting themselves with varicose veins at the Royal Waterloo Hospital varicose ulcers occurred in about 22 per cent. He states that this figure is much higher than the true incidence of ulceration associated with varicose veins, as a relatively large number of patients with varicose veins do not seek treatment until ulceration has occurred. In Steubner's[3] cases ulceration occurred in 49 per cent.

Varicose ulcers are the result of changes produced in the skin and subcutaneous tissue, which are dependent upon stagnation of blood in the dilated and incompetent veins. In 1921 Magnus[4] demonstrated that with the lower extremity in the horizontal position blood flowed through the varicose saphenous veins toward the heart. However, in a number of cases with the extremity in the dependent position or even at an angle of 45 degrees, the blood flowed peripherally and that the centrifugal rate of flow was greater than the normal flow toward the heart. He believes that as a result of the stasis there is an accumulation of metabolites which exert a detrimental effect on the tissues of the extremities. Schaeffer[5], in determining the non-protein nitrogen content of blood obtained from varicose veins and comparing the values with those obtained from veins of the upper extremity, found that in 64 per cent of the cases the blood obtained from the varicose veins contained from two to three times as much non-protein nitrogen as that obtained from the arm. In a control group of cases it was found both by Schaeffer[5] and by Klapp[6] that a similar but less difference occurred in normal individuals. DeTakats and his co-workers[7] have shown that the carbon dioxide content of the blood in the varicose veins is definitely higher than that in the normal superficial veins, the average increase being 3.9 per cent by volume. They also found an average decrease in the oxygen content of 4.84 per cent by volume. As a result of stasis of blood with its associated anoxemia, there occurs an accumulation of metabolites and a local acidosis. Franke[8] was able to demonstrate that in experimentally artificially produced venous stasis there was diminished alkaline reserve in the blood of the vein in which the stasis was present. Associated with these changes there is a decrease in the arterial blood supply. DeTakats and his co-workers[7] found that approximately 50 per cent of patients with varicose veins show evidence of diminished arterial supply as determined by the skin response to histamine. As a result of these changes atrophy of the skin, dermatitis, and pigmentation occur, which following trauma (especially apt to occur in the lower portion of the leg) produces ulceration. The trauma, which is usually trivial, results in a wound through which micro-organisms may enter and produce a localized infection. Because of the local diminished blood supply and the decreased resistance of the part, infection is especially apt to occur and persist with resulting ulceration.

An attempt has been made by many authors to isolate a specific organism from varicose ulcers. Marcovici[9] found a large number of different types, but was unable to find any specific organism in varicose ulcers. Nobl[10] was unable to demonstrate any relation between the size and character of the ulcer and the type of organism found in it. McPheeters[11] believes that septic emboli originating in infected teeth and tonsils may be an etiological factor in varicose ulcers. Baerthlein[12], in a recent contribution on an extensive bacteriological study of varicose ulcers, isolated the following organisms from 320 ulcers: staphylococci, 308 times; diphtheria bacilli, 178 times; colon bacilli, 98 times; streptococci, 66 times. From this study he believes

that diphtheria bacilli frequently are the cause of varicose ulcers.

The most frequent site for varicose ulcers is on the left leg just above the internal malleolus which, because of the long unsupported internal saphenous vein, is the area in which the greatest amount of stasis occurs. Varicose veins occur more frequently on the left side than on the right, because of the peculiar anatomy of the venous system on the left, favoring obstruction. Goodman[13] found in 64 cases of chronic ulcer of the leg that the right leg was involved in 25, the left in 26, and both legs in 13 instances. In the 26 cases in which only the left leg was involved, all of the ulcers were clinically of the varicose variety. In 73 per cent of these patients the Wassermann reaction was negative, whereas only 40 per cent of these with ulceration on the right leg had a negative Wassermann reaction. Of the 320 cases of varicose ulcers examined by Baerthlein,[12] 177 were on the left leg, 129 on the right, and 14 were bilateral. The etiology of varicose veins may be summarized as follows: venous stasis with its resulting anoxemia; local acidosis; and stagnation of the metabolites in the skin and subcutaneous tissue which, following a trivial trauma, predispose to delayed healing and to infection.

A varicose ulcer begins as a small cutaneous defect, but because of the lowered resistance of the part and infection, the defect becomes larger unless active therapy is immediately introduced. The size of the ulcer depends upon the degree of infection. It may vary from two to three millimeters to many centimeters in diameter. A varicose ulcer is characteristically shallow, the edges are usually sloping, and the appearance of the base varies with the type of infection. If there is considerable infection, the base is often covered with a purulent exudate beneath which granulation tissue may be seen. As the infection becomes less, the base becomes filled with healthy granulation tissue. Immediately surrounding the ulcer and extending for varying distances, changes in the skin, such as atrophy, pigmentation, and loss of the normal elasticity, are present. The pigmentation seen in varicose ulcers is diffuse and extensive, often encircling the whole circumference of the lower leg. Itching of the part, especially before ulceration has occurred, is frequently complained of and is dependent upon the dermatitis. Scratching of the leg induced by itching may be the trauma which initiates the ulcerative process. Pain is almost invariably present in varicose ulcers, the degree being dependent upon the amount of inflammation. It is frequently the symptom which causes the patient to consult a physician. There is a constant discharge from the ulcer, the character and amount of which varies with the type and degree of infection. Only rarely is it profuse. Edema, clinically demonstrable, is seldom present. As Frey[14] has shown, "latent" edema which may be demonstrated by the intradermal salt test is usually present. Changes in the bones and vessels of the extremity, which are dependent upon the ulceration, frequently occur. These changes vary chiefly with the chronicity rather than with the extent of the ulceration. According to Morris,[15] the sequence of events is as follows: As the result of infection a lymphangitis occurs, which in a large percentage of cases becomes chronic. Lymphatic infection extends upward as far as the regional lymph nodes and also deeply to involve the perivascular lymphatics. In this way organisms can gain entrance to the walls of the deep vessels. As a result of the arteritis so produced, calcification occurs. The calcification of the vessel may be in part responsible for the decrease in the arterial supply of the extremity and in this way a vicious circle is produced. As the nutrient vessels entering the tibia and fibula are also involved, changes in these bones may occur. Extensive bone changes, such as periostitis and even chronic forms of osteomyelitis, occur in patients who have had the varicose ulcer

for long periods of time. According to Heiner,[16] the two most frequent sequelae of the "varicose complex" are periostitis and Sudek's bone atrophy. In his series of cases, periostal changes were found in 20 per cent. The bone changes are not only found beneath the ulcer, but characteristically involve the entire tibia or fibula or both. Phlebitis of the superficial veins may occur, the infection originating in the region of the ulcer. This complication, however, occurs much less frequently than one would imagine. Erysipelas is also an infrequent complication. Further complications of varicose ulcers are: extensive cicatrization, and malignant change developing on the base of an ulcer (Marjolin's ulcer, which fortunately is relatively rare). Due to the presence of the rolled, indurated edge the latter condition should be suspected in an ulcer which has persisted for a long period of time. The diagnosis, however, can be made only by a microscopic examination of an excised specimen.

TREATMENT OF VARICOSE ULCERS.

The treatment of varicose ulcers is largely one of prophylaxis in that ulcers should never be allowed to develop in the case of varicose veins. As varicose ulcers are produced by trauma and infection of tissues, the vitality of which has been decreased as a result of venous stasis, the prophylactic treatment of varicose ulcers consists of the relief of venous stasis and the avoidance of trauma and infection. The venous stasis and increased venous tension in a varicose vein may be relieved palliatively by supporting the veins or more or less permanently by either obliterating the vein or extirpating it. The injection methods have largely replaced the operative measures in the treatment of varicose veins. The injection treatment consists of introducing into the lumen of the vein, corrosive substances which produce an endophlebitis. As a result of injury to the intima of the vein a sterile thrombus, which later becomes organized, is formed. Because of its simplicity and safety and because the method may be performed as an ambulatory type of treatment, the injection of varicose veins represents probably the ideal treatment at the present time. The reports of Sicard,[17] Nobl,[18] Meisen,[19] McPheeters,[20] Forestier,[21] DeTakats,[22] Kilbourne,[23] and others emphasize the reliability of this type of therapy. Kilbourne[23] found from a statistical study of questionnaires sent to most of the large American hospitals the following facts: Of 4,607 cases of varicose veins in which excision had been performed one fatality occurred in every 250 cases. In over 53,000 cases of varicose veins treated by injection, less than one death occurred in 4,000 cases. Recurrence after operation averaged 30 per cent, whereas the average recurrence after injection was 6 per cent. That this latter percentage of recurrence following the injection treatment is probably too low is suggested by a recent report of Howard, Jackson, and Mahon,[24] in which recurrences occurred in 79 per cent of all patients treated, or 98 per cent of all those which were followed a year or more. That recurrence is not only possible but also probable is evidence by the experimental work of Ochsner and Garside,[25] in which it was found that canalization of the thrombi produced by the injection of sclerosing substances into the veins of animals almost invariably occurs.

The solutions which have been used as sclerosing agents are sodium chloride in 15, 25, 30, and 40 per cent solutions; sodium salicylate in 10, 15, 25, 30, and 40 per cent solutions; glucose, 50 per cent solution; bichloride of mercury, ½ to 1 per cent solutions; invert sugar, 50, 60, and 75 per cent solutions; quinine and urethane solution; and various combinations of the above solutions, especially glucose and sodium chloride, glucose and sodium salicylate, sodium salicylate and invert sugar. Hypertonic solutions of sodium chloride and sodium salicylate are powerful and efficient sclerosing substances, but have the distinct disadvantage of producing marked pain and muscular cramp immediately fol-

lowing the injection and a slough if a perivenous injection is made. For this reason, many authors feel that the employment of less caustic solutions such as glucose and invert sugar is to be desired. These latter solutions, because of their less irritating effect, are less efficacious. As a sclerosing agent, invert sugar is to be preferred to glucose, because it may be used in higher concentrations, as invert sugar solutions are less viscid than glucose solutions. A quinine and urethane solution has several advantages; *i. e.*, it may be used in small quantities (½ c.c. to 2 c.c.) and is painless. However, the use of quinine and urethane is contraindicated during pregnancy, during menstruation, and in patients in whom there exists an idiosyncrasy to quinine. Mercurial solution seldom are employed at the present time, because of the extreme toxicity of the drug, and the danger of mercurial poisoning. It may be said that there is no one solution the use of which is applicable in all types of veins. It also should be emphasized that there is considerable variation in the response of different veins to the action of the sclerosing substances in that in one vein a severe endophlebitis may result from the injection of a relatively mild irritant, whereas in another vein the use of relatively large quantities of extremely irritating solutions will produce little change. For this reason it is advisable in all cases to begin with small quantities and dilute solutions until the degree of reaction can be determined for that particular vein. Probably the ideal solution is a combination of sodium salicylate, 15 per cent, and invert sugar, 50 to 75 per cent, because it is an efficient sclerosing agent, produces little or no pain, and is less apt to result in a slough if a perivenous injection is made.

The contra-indications to the injection treatment of varicose veins are: 1. Acute phletitis (no injection should be made within six months after the disappearance of all the clinical signs of the infection); 2, obstruction in the deep circulation, in which case the superficial veins serve to conduct the blood from the lower extremity. The treatment may be used in all other cases, but care must be taken that use of a particular sclerosing substance is not contraindicated; *i. e.*, quinine and urethane in pregnancy, sugar solutions in diabetes, etc. The injection of sclerosing substances into the lumen of varicose veins produces an obliteration of the vein, which may be obtained either through the medium of a clot or by approximation of the two injured surfaces of intima. Because of the almost invariable occurrence of canalization of the artificially produced thrombus, compression of the vein so that the damaged intimal surfaces may be approximated is preferable. In this way obliteration of the vessel is produced with the production of a minimal amount of clot, which obviously diminishes the danger of embolism, and obliteration is accomplished with relatively little chance for recurrence, as little or no thrombus is present to become canalized. The importance of this has been recently emphasized by Kern. The majority of cases of varicose veins may be successfully treated by injection. In those cases in which recurrence occurs, reinjection may be employed in some, but surgical extirpation may be necessary in others. In some few cases, especially those in which the varicosities are located principally in the thigh, surgical extirpation of the veins will probably be necessary.

The active treatment of varicose ulcers consists, first, in combating the infection, which is almost invariably present. The ulcer which is badly infected should be treated as any other infected wound. Physiologic rest of the extremity and the application of hot, wet dressings to the ulcer are of great therapeutic value. Hypertonic solutions are preferable to either isotonic or hypotonic solutions. Elevation of the extremity is extremely important in badly infected ulcers. Frey[14] has shown that patients with varicose

ulcers almost invariably show a "latent" edema of the extremity. This edema is due to venous stasis and in part due to the associated inflammation. The edema, even though only "latent", must be corected by some type of support to the extremity. Nobl,[10] in 1924, advocated the compression treatment of varicose ulcers, which consisted of bandaging the extremity and producing pressure on the ulcer by a sterile rubber sponge applied directly over it. Relatively recently the compression treatment of varicose ulcers has been emphasized by Wright,[26, 27] Deville,[2] Davies and Drynan,[28] who employ an elastic bandage (elastoplast), which tends to compress the extremity and prevent the formation of edema. Wright[26] reports a series of 478 healed ulcers in 324 patients in which there was a total area of 1,480 square inches of ulceration. The average rate of healing was one square inch in 5.1 days. Davies and Drynan[28] believe that employing the technic of Wright it is possible to calculate mathematically the length of time which will be necessary to cure the ulcer. Their calculation is as follows:

The area of the ulcer in square inches $\div 5 + 3 =$ time in weeks.

The use of the Unna's paste boot is, according to the author, preferable to other types of bandage in the treatment of varicose ulcers in spite of the possible disadvantage that it is technically somewhat more difficult to apply than are the elastic plaster bandages. The Unna's paste boot is beneficial not only because of the support it gives the extremity but also because of the hydroscopic and slight antiseptic properties of the zinc oxide, gelatin, and glycerine paste. By the use of the boot the secretion from the ulcer is completely absorbed so that maceration of the surrounding skin is prevented. The boot is applied directly over the ulcer and serves as a scaffold along which the epithelium may grow. Thomas,[1] in 1910, showed that the average time saved a patient with chronic ulceration of the leg by employment of the Unna's paste boot in a series of 42 cases was 105.2 hours. The average time saved the surgeon was 5.56 hours, and the average amount saved in dressings was four dollars and ninety-seven cents. The savings in the cost of dressings varied from thirty-five cents to fifty-three dollars. The amount of time saved the surgeon varied from 2 hours to 35 hours, whereas that saved the patient was from 4 hours to 17 days. Unna's paste boot has many advantages over elastic bandages and stockings. The boot must be worn continuously and cannot be reapplied by the patient once it is removed. In this way a constant pressure is maintained on the extremity, and it is not possible for the patient to arise in the morning without applying the bandage. An Unna's paste boot is flexible but inelastic. Irrespective of the grade of rubber which is employed in elastic stockings or elastic bandage, deterioration and permanent stretching occurs, so that even though an elastic stocking may conform perfectly to the extremity immediately after its construction, within a relatively short period of time it has lost a certain degree of elasticity and no longer fits the leg. As the edema disappears from the extremity, the leg becomes smaller. A new boot may be applied with relatively little cost, whereas an elastic bandage or stocking may be too expensive to renew after one to two weeks. It is extremely important before applying an Unna's paste boot to decrease the edema of the part as much as possible by having the patient elevate the extremity from 15 to 20 minutes. The paste, as originally advocated by Unna, consists of four parts each of zinc oxide and sheet gelatine and ten parts each of glycerine and water. It is prepared in the following manner: Ordinary sheet gelatine, after being soaked over night in the water, is heated over a water bath. To this, zinc oxide and glycerine are slowly added. The mixture when warm is fluid and when allowed to cool is gummy and gelatinous. The technic of the appli-

cation of the boot is briefly as follows: The knee is flexed to a right angle, the foot is flexed on the leg to an angle of less than 90 degrees and is held by an assistant. A towel, placed around the thigh, is held by the patient, thus keeping the knee flexed. Employing a roll of bandage, two or three turns are made at the upper extremity of the leg just below the knee. A similar bandage is applied over the metatarsophalangeal joint. By means of paint brushes, warm Unna's paste is applied over the entire unshaved leg, including the ulcer, care being taken not to cover the upper portion of the upper bandage or the lower portion of the lower bandage. After the entire leg is covered with paste, the bandage is applied, care being taken to prevent any wrinkles or creases. This is accomplished by cutting the bandage when reversing seems necessary. As the bandage is applied, the Unna's paste is painted over it, the bandage and paste being applied directly over the ulcer. Longitudinal as well as circular strips of gauze are applied to strengthen the boot. Several layers of gauze and paste are applied in this manner. After the application of the boot, ten or fifteen minutes are allowed for it to dry after which talcum powder is dusted on the surface. In order to keep the boot clean a white cotton stocking, which may be removed and washed, may be worn. The length of time which a patient with a varicose ulcer may wear a boot depends upon the amount of discharge. In those cases in which there is considerable secretion the boot can be worn from a few days to two weeks. It is, however, desirable to change the boot as soon as the secretion saturates that portion of the boot overlying the ulcer. Practically all varicose ulcers will respond in a very short time to the above outlined treatment. However, in some cases in which the ulceration is extensive, it may be necessary to resort to skin grafting, which, however, is exceptional. Occasionally, in old, neglected cases of varicose ulcer because of the marked lymphatic obstruction a lymphangostomy, as advocated and practiced by Trout[29], Mason[30], and others, becomes necessary.

SYPHILITIC ULCERS.

Second only to varicose ulcers, syphilitic ulcers represent an important type of chronic ulceration of the lower extremity, especially in the South, where there is a large negro population. Practically all syphilitic ulcers are caused by the breaking down of cutaneous or subcutaneous gummata. A gumma is a late manifestation of syphilis, occurring in the tertiary stage. Whereas gummata may occur at any time during the course of infection, they usually do not occur until at least two years after the initial lesion. Gummas occur most frequently on the upper half of the leg, the face, the trunk, the arms, and the scalp. They appear as firm cutaneous nodules, which gradually enlarge. These nodules are composed of large areas of leukocytic and plasma cell infiltration. An extensive peripheral endarteritis, producing an obliteration of the vessels supplying the area, leads to a massive central necrosis with the production of a gummy-like material. Such nodules rupture either spontaneously or more frequently following trauma with the production of an open lesion from which discharges a gummy material. Trauma plays an important role in the production of an ulcer in syphilis. Syphilitic ulcers, as other luetic manifestations, are likely to be bilateral and are usually multiple. As gumma occur more frequently in the upper third of the leg, it is at this site that syphilitic ulcer is most likely to occur. However, not infrequently, syphilitic ulcers may occur in the lower portions of the leg. Goodman[13] has shown that ulceration occurring on the right leg is very frequently syphilitic. Of 25 cases of ulcer involving only the right side, 6 were clinically syphilitic, and only 40 per cent

of these patients had a negative Wassermann reaction. Syphilitic ulcers are characteristically painless, unless there is a considerable amount of secondary infection, at which time the pain and tenderness depend upon the degree of inflammation. A typical syphilitic ulcer (one in which there is relatively little secondary infection) is either round or crescentric, and is produced by the breaking down of a gumma. It is deep and has a punched out appearance, due to the evacuation of the necrotic center of the gumma. The base of the ulcer is covered with granulation tissue, which does not resemble normal, healthy granulation tissue and is often described as resembling "washed leather." Usually there is some secondary infection, and for this reason syphilitic ulcers do not appear as the typical lesion described above. Because of the secondary infection, the ulcer extends, producing a considerable loss of tissue, the defect being irregular in shape and size. Immediately surrounding the ulcer is a narrow area of pigmentation which, as a rule, persists after the ulcer has healed. The healing of the ulcer occurs by cicatrization, the scar being deeply pigmented for many years. The discharge from a non-infected syphilitic ulcer is at first of a gummy character, which is produced by the breaking down of the gumma; later the discharge becomes thin. If considerable secondary infection is present, the discharge not infrequently is seropurulent. *The odor of a syphilitic ulcer is characteristically foul and is of great diagnostic significance.* It is usually possible to diagnose a luetic ulcer merely by the odor. The characteristic odor is not generally appreciated by physicians, but frequently it is the odor in addition to the ulceration which brings the patient to the physician.

The treatment of syphilitic ulcers is largely one of prophylaxis. Adequate prophylactic treatment in cases of syphilis will prevent the production of ulcers. In the presence of gummata, care should be taken to prevent trauma and infection, which may result in ulceration. The active treatment of syphilitic ulcers consists also of anti-syphilitic treatment, as well as the treatment of the ulcer itself. Iodides (relatively large doses up to 75 or 100 grains a day) and spirocheticides should be administered. In the presence of marked infection hot hypertonic solutions should be applied to the ulcer. As in the case of varicose ulcer as advocated by DeTakats[7], Ochsner and Garside[31], the application of a compression bandage, especially an Unna's paste boot, is of great value, as almost invariably there is an associated venous and lymph stasis. In long standing syphilitic ulcers healing is likely to be markedly prolonged even in spite of very active treatment, because of the endarteritis and its associated diminished blood supply. If, however, stasis is relieved, infection combated, and antisyphilitic treatment instituted, most syphilitic ulcers will heal.

SICKLE CELL ANEMIA ULCERS.

One of the not infrequent causes of chronic cutaneous ulceration of the lower extremities in the negro race is sickle cell anemia. Ulceration of the lower extremity is one of the common findings in sickle cell anemia and has been described by most of the authors who have reported cases of this disease. According to Huck[32], "sickle cell anemia may be defined as an hereditary disease transmitted by and occurring in both males and females with equal frequency, in which the red cells of the blood acquire a sickle or crescent shape in vitro. The disease is characterized by certain clinical symptoms, especially those of anemia and leg ulcer. All cases so far observed have occurred in the negro race." The cause of the cutaneous ulceration in sickle cell anemia is not known.

Pathologically, the ulcer which occurs in sickle cell anemia does not differ remarkably from a simple, inflammatory ulcer. According to Huck[32], the papillæ of the epithelium near the edge of the ulcer are thinned remarkably, and in the corium the connective tissue is increased in amount.

There is an increase in the mononuclear cells, as well as the plasma and large mononuclear cells. At the edge of the ulcer the epithelium shows little tendency to grow downward. The base of the ulcer is composed of granulation tissue and there is a total absence of necrotic membrane covering it. In those areas in which there are blood vessels, sickle cell shaped red blood cells can be seen. Clinically, the ulcers are found usually in the region of the malleoli and occasionally on the dorsum of the foot or on the leg. They are usually round, have a punched out appearance, and in this respect are not unlike syphilitic ulcers. They are shallow, and the edges are indurated. According to Klauder[33], they may be multiple or single, unilateral or bilateral. They may occur spontaneously, but usually follow trauma, which is usually of a mild degree. According to Steinberg[34], they vary in size from 1½ cm. to 7 cm. in diameter. The prognosis as far as the ulcer is concerned is good, as simple rest in bed, the application of a mild ointment, such as zinc oxide ointment, almost invariably results in a cure. However, ulceration is apt to recur. The scar which is formed is, according to Steinberg[34], glossy, smooth, and without pigment, but is surrounded by a pigmented skin. In all young negroes in whom ulceration occurs in the region of the ankle, feet, or lower portion of the leg, the possibility of sickle cell anemia ulcer must be considered. Because of the character of the ulcer, it is apt to be confused with syphilis. However, in sickle cell anemia the characteristic odor is lacking. Positive diagnosis is made by an examination of the blood which will reveal a typical sickle or crescentric shape of the erythrocytes. Cases of sickle cell anemia with ulceration of the lower extremities have been reported by Herrick,[35] Washburn,[36] Cook and Meyer,[37] Huck,[32] Sydenstricker,[38] Dreyfoos,[39] Browne,[40] Steinfield and Klauder,[33] Alden,[41] and Rich.[42]

MYCOTIC ULCERS.

Mycotic ulcers of the extremities are fortunately rare, but occur more frequently than is generally supposed by the medical profession. The possibility of a mycotic infection should be considered in all cases of atypical ulceration, which do not present the characteristics of either varicose or syphilitic ulcers. The etiologic factor in mycotic ulcers is the specific fungus which gains entrance to the body usually following trauma. The condition is largely an occupational disease, and the lesions are found almost entirely upon the exposed parts, either the lower or upper extremities. White[43] is of the opinion that in cases of mycotic dermatitis a decrease in the arterial blood supply produced by obliterative endarteritis is responsible for the persistence of the lesion and also the ulceration.

BLASTOMYCOSIS.

Blastomycosis is the most frequently encountered mycotic ulcer of the extremities. The original lesion consists of a papule which usually follows a trivial injury. The papule extends peripherally and ulceration occurs. Characteristically there is a tendency for central healing with peripheral extension. The edges of the ulcer are raised and sharply defined. Multiple abscesses containing a mucopurulent material are usually situated beyond the periphery of the actual ulceration. These abscesses may rupture, producing numerous peripherally located ulcers from which drains a mucopurulent material containing the specific fungus. The lesions are painless. The edges of the ulcer are usually separated from the normal skin by a distinct hyperemic zone.

ACTINOMYCOSIS.

The actinomycete, or ray fungus, may be the etiological factor in chronic cutaneous ulceration of the lower extremities. The condition is characterized by multiple cutaneous and subcutaneous chronic abscesses. The abscesses rupture spontaneously or more frequently are incised, resulting in ulcer formation. The wall of the abscesses and subsequently the wall of the ulcer is composed of granulation tissue beyond which is a layer of dense, fibrous tissue. Characteristically, multiple sinuses and

ulcers from which exude a thick, yellow pus, in which the sulphur granules may be demonstrated, are present.

SPOROTRICHOSIS.

Sporotrichosis occurs relatively infrequently on the lower extremities, it being found much more frequently in the upper extremities. It is characterized in the beginning by red, painless nodules associated with ascending lymphangitis and localized lymphadenitis. Multiple ulcers occur along the course of the lymphatic chain. These ulcers are characterized by overhanging edges and exuberant granulation tissue. The discharge consists of thick, yellow pus.

All mycotic ulcers have a rather characteristic musty odor, which has been compared by Beven to that of freshly turned sod. The diagnosis is made by finding the fungus, which may be in the discharge from fresh lesions, but which in old long standing lesions can be demonstrated only in scrapings from the wall of the ulcer.

Treatment of all mycotic ulcers consists of adequate surgical drainage of all those foci which are already draining and curettage of the ulcer in order to remove as much of the disease process as is possible is desirable. Local extirpation of the lesion may be accomplished in small lesions. Massive doses of iodides, either in the form of potassium or sodium iodide in doses up to 1,000 to 1,500 grains daily, are administered. It is well to begin with doses of 25 to 30 grains three times a day, and increase this 15 grains daily. Roentgen-ray or radium radiation in massive doses constitutes the best method of treatment.

TUBERCULOUS ULCERS.

Tuberculous ulcers, fortunately, occur very infrequently in the United States, whereas they occur not uncommonly in Europe. This is true not only of cutaneous ulceration but is also true of other types of surgical tuberculosis and is probably due to the fact that in the United States careful pasteurization of milk and control of cattle herds, as regards tuberculous infection, are usually practiced. A tuberculous ulcer is the result of the breaking down of a tuberculoma and is usually initiated by trauma. It usually occurs in a widespread tuberculous infection. It is found most frequently in girls under the age of twenty. The ulcers occur in the upper part of the leg, usually the calf, and are usually bilateral. The ulcers are small, multiple, and extremely painful, the pain being a prominent part of the symptom complex. The edges of the ulcer are undermined even for a considerable distance, so that sloughs occur around the periphery of the ulcer. Discharge from the ulcer is glary, mucoid, and scant. The base of the ulcer is pale and is either covered with no granulation tissue or frequently with large, edematous, pale granulations. Surrounding the edge of the ulcer a pigmented area usually exists. A large ulcer is usually produced by coalescence of several small ones. As tuberculous ulcers heal, they tend to form considerable cicatrix, which at times produces deformity.

The treatment of tuberculous ulceration of the extremities is often unsatisfactory, because of the generalized tuberculous infection present. Treatment consists of general hygienic care and the treatment of the systemic tuberculosis. In addition, the local and general application of ultraviolet ray therapy is of distinct value. Roentgen ray and radium radiation in relatively small doses is often of distinct value in tuberculous involvement of the skin.

TROPHIC ULCERS.

Ulceration is especially prone to occur in all conditions in which there is trophic change of the skin. The initiating cause of the ulcer is almost invariably a trauma, the lesion failing to heal, however, because of the trophic change in the skin. Trauma is especially favored by the anesthesia which is usually present in these cases. The conditions which are usually responsible for the trophic changes are affections of the spinal cord, peripheral nerve lesions, and certain systemic diseases. The most frequent affections of the spinal cord producing trophic changes are tabes dorsalis,

fracture of the spine with cord injury, syringomyelia, and spina bifida. Peripheral nerve lesions consist of nerve injury and peripheral neuritis, whereas the systemic diseases responsible for trophic changes are diabetes mellitus and arteriosclerosis. The changes which occur in the skin and subcutaneous tissue following division of peripheral nerves are described as follows: The analgesic portion becomes swollen, the surface of the skin becomes rough, the skin becomes inelastic and wrinkled. The affected portion is drier than the unaffected portion and is of deeper red color. Because of the analgesia, repeated trauma is likely to result, as the protective sensory reflexes have been abolished. In addition to this, because of the trophic disturbance in the skin, the resistance of the part is lowered which favors ulceration. The classical trophic ulcer is the perforating ulcer which occurs in tabes dorsalis and which is found on the plantar surface of the foot, usually on the big toe or the ball of the foot. The ulcer is round and extends down to the joint or bone. Before an ulcer is noticed, the callus usually appears at the site. Beneath this callus, infection usually occurs. Following removal of the callus the ulcer appears. The skin surrounding the ulcer is thickened and calloused. There are varying degrees of secondary infection. Changes in the underlying structures, especially the bones, are associated with cutaneous ulceration. In most trophic ulcers there is an analgesia of the surrounding skin and the ulcers. The ulcers are, therefore, painless. The discharge from the ulcer is a watery pus with a foul odor. The condition is resistant to most forms of therapy.

The treatment of trophic ulcers consists first of prophylaxis. In individuals with nerve lesions, especially those exhibiting areas of anesthesia, careful avoidance of trauma is necessary. Absolute cleanliness of the extremities in order to prevent secondary infection, should ulceration occur, is also imperative. The active treatment of trophic ulcer consists of combating the secondary infection by physiologic rest, the application of hypertonic solutions, and an attempt to increase the blood supply to the part by the application of heat. Heat must, however, be used cautiously in those cases in which analgesia is present, as a burn is very apt to occur. The excessive callus which usually surrounds the ulcer should be removed, as it interferes with healing. The underlying condition causing the trophic changes should be treated.

SUMMARY AND CONCLUSIONS.

Chronic cutaneous ulceration of the lower extremities represents a difficult problem. The ulceration is almost invariably a symptom of an underlying diseased process. Therefore, any therapy directed toward this one clinical manifestation of the condition without a correction of the underlying pathologic lesion is of no or little value. In order to treat chronic cutaneous ulcerations properly it is essential that a correct diagnosis be made and that each case be individualized and the disturbed physiology corrected. As most chronic ulcers of the leg are infected, every attempt should be made to combat the infection, especially in the presence of acute infection, by the use of hypertonic dressings. An edema, the result of venous and lymph stasis, is almost invariably associated with all types of chronic "leg ulcers." In order to obtain the best results in the treatment of these ulcers, this edema must be relieved, which is best accomplished by the use of supportive dressings such as Unna's paste boots.

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DISCUSSION.

Dr. George Wright (Monroe, La.): No physician or surgeon exists who has not at some time been harassed by patients with this dreadful and more or less loathesome condition. It must be viewed from two angles, the disease which brings on the ulceration and the ulceration itself. We are too often inclined to treat the lesion and overlook the constitutional manifestation which is really far more important. Ulcers practically always exhibit some venous stasis, which reaches its climax in varicose ulcers and which is seen to a lesser degree in tuberculous ulcers. Therefore, after the local and constitutional disease has been diagnosed, the problem of treatment presents itself as both local and constitutional. Syphilitic ulcers demand specific treatment, mycositic ulcers must be treated with iodides, and so on. Then the local lesion must be considered, the relief of the venous stasis, the restoration of the drainage which has been interferred with. Ulcers of the chronic variety are usually infected.

They have usually been treated with pastes and ointments, sometimes for two or three years, which increases the difficulties of drainage. In all cases the tissue spaces, the lymphatics and the capillaries are blocked by devitalized tissue, and there is always pus present.

The treatment must first of all be directed towards securing rest for the part, though it is perfectly possible to have the rest treatment applied in an ambulatory patient. Up to two years ago we treated all badly infected cases by the open method, and some of you who are present may recall that I read a paper on the subject, which Dr. Cohn discussed, I believe. We put the patient to bed, we employed a special apparatus which fastened over the leg and which permitted as many drips as we wanted, and we irrigated the affected parts with a hypertonic salt solution, the leg being elevated. This cleared up the infection and reduced the edema, and it seems a rational treatment in view of the findings which the laboratory gives us: the veins in the neighborhood of ulcers show a diminution of the oxygen content, an increase in the CO2 combining power, and also an increase in the protein nitrogen. These findings are always apparent in the veins of the lower extremities, I believe, but they are exaggerated in ulcers. After the local condition has been benefited by the treatment described, we use skin grafts, and for the next few days we keep the wounds covered with hot compresses of hypertonic salt solution, after which we return to the drip. The ulcerated area heals under this treatment at the rate of about a square inch each four days, the healing being more rapid after the skin grafting is done.

During the last two years we have been more and more inclined to use the Unna boot as advocated by Ochsner and Cutting, but it is not adapter to all cases, particularly those in which the ulceration is on the dorsum of the foot or is confined to the malleoli of the ankle.

Dr. E. L. Sanderson (Shreveport, La.): Dr. Wright and I are in the same position as two hard-shelled preachers who were attending a convention. The moderator decided it would be a good plan to have everybody begin by reciting a verse of Scripture. They sat in the back of the room, and the supply of verse got lower and lower, and when they were finally called on, it was very low indeed. So the first of them rose, in response to his name, and recited the verse, "Jesus wept", and the other, rising in response to his name, simply said, "He sure did."

That is the way I feel because Dr. Ochsner has covered the field so thoroughly. I shouldn't be surprised if this disease was not known in Biblical times. I have always thought it was what troubled Lazarus. You remember, the dogs licked the sores on his legs. And I have often wondered if they did not cure him. You have probably noticed, as I have, how rapidly the wounds of dogs heal if they are only so located that they can be reached by the tongue. There seems to be something very effective in the dog's saliva.

Another interesting point is the rapidity with which wounds heal in which maggots develop. I had a curious experience with that sort of case. I saw a tramp with ulcers of the leg, and I simply looked at him, I didn't touch him. Later I heard of him in another town, and by that time he had gotten a lawyer and was going to sue me because maggots had appeared in his wounds, even though I had merely looked at them. But before he could get around to blackmailing me, the ulcers healed and I am sure he was very much disappointed.

We feel relieved that Dr. Ochsner has not advanced an absolute cure for sore legs; just think what future medical students would miss if all the leg ulcers were cured.

Dr. Ochsner's paper is a classic, as we expected. There is nothing to add.

Dr. B. C. Garrett (Shreveport, La.): Last summer I came across Dr. McPheeters' book on varicose veins, and since I was going north, I thought I would stop in and see how his treatment worked out. When I reached Minneapolis, I have never gone through such a crowd of tramps as I had to pass through from the station to the hotel, and the manager of the hotel explained their presence on the ground that two mills had just closed. But next day I found about half of them in Dr. McPheeters' clinic.

I was very much interested in his treatment. He takes a sponge, he says the variety makes little difference, covers the ulcer with it, and then uses an Ace bandage to wrap the leg, beginning from the ankle and working up to the knee. He makes the patients walk around, he will not permit them to go to bed. I saw many cases in which the benefit was apparently miraculous under this treatment. He also uses the injection treatment, in some instances carrying the injection clear up to the internal saphenous. But there were some he did not cure, especially some old ladies, who were quite frank about how long they had been coming. I was glad to see, too, that even such an authority has his failures, for I have so many I should have felt very much upset if I had gone elsewhere and seen only cures.

Dr. J. D. Rives (New Orleans): I admire Dr. Ochsner's name for chronic leg ulcers. I have been treating them for twelve years without collecting five cents on any of them, and "Poor mans' disease" is the proper term.

I rise to discuss the syphilitic type of ulcer, which most essayists seem to avoid. I want to

protest against the statement that they exhibit definite characteristics. I do not consider that they do. I have not tabulated the figures, but I know they are not confined to the upper third of the leg, I am quite sure they are seen in just as great numbers in the lower third of the leg. Nor do I consider the physical findings characteristics. They may be characteristic before secondary infection sets in, but the physician does not see them in that stage once in a hundred times. They are usually a year old when he gets them. All ulcers look alike after secondary infection has destroyed the characteristics which undoubtedly were present in the first stages.

We have found the roentgen ray of great value in the differential diagnosis, and I should preface that statement with the statement that we find the Wassermann of no value. The incidence of positive Wasserman is no higher in patients with syphilitic ulcers than it is in the general population. But the roentgen ray does show a characteristic periostitis to be almost invariably present in the bones of the leg. Of course the area directly beneath the ulcer and in the vicinity will show this periostitis in any case, and I do not refer to that localized manifestation. But if there is an ulcer on the outer side of the leg and a periostitis of the tibia, or an ulcer on the inner side of the leg and a periostitis of the fibula or, more convincing still, an ulcer of one leg and a periostitis of the bones of the other leg, then coincidence can be ruled out, and the case written down as definitely syphilitic, no matter what the Wassermann does or does not show. The roentgen ray diagnosis in the late stages is as safe as the Wassermann diagnosis in the early stages. We employ this method routinely in our clinic at Touro, with the excellent cooperation of Dr. W. F. Henderson, and we consider it extremely valuable.

I might add one other comment: I wonder that Dr. Ochsner did not comment in the discussion of trophic ulcers on the possibility of leprosy of the neurological type. I am sure he has seen such cases, and simply failed to mention the possibility.

Dr. Alton Ochsner (closing): Dr. Wright's suggestion of continuous irrigation for patients with badly infected ulcers is excellent. We all like to keep our patients ambulatory, but we gain time, frequently, by putting them to bed for a few days. The compression bandage is always applied with more efficacy when this form of treatment has been first employed. I might say at this point that any compression bandage, especially Unna's boot, is best put on when edema of the extremity has been absolutely eliminated. The ideal method is to put it on the morning, before the patient arises, and this is possible in hospital cases. Office patients should be required to rest on a couch for half an hour, with the foot and leg elevated, to secure the same conditions.

Dr. Sanderson's story of the tramp who was going to sue him impressed me not only from the aspect of the maggots but also from the lesson that it carried, that these patients are frequently best let alone. In my opinon, frequent changes of dressings do more harm than good, and simple measures are often best.

The sterile rubber sponge has been advocated by Nobl of Germany, his idea being that the local compression checks exuberant overgrowth and keeps down the granulations, but generalized compression by the Ace bandage certainly plays a part in the cures described by Dr. Garrett and seen in McPheeters' clinic.

Dr. Rives is undoubtedly right in his statement that the syphilitic ulcer is quite as frequently seen in the lower as in the upper leg. I should have mentioned leprosy as a factor in trophic ulcers, and I thank him for calling my attention to the lack of emphasis on this point.

RECURRENT DISLOCATIONS OF THE SHOULDER.*

E. D. FENNER, M. D.
NEW ORLEANS.

Recurrent dislocations of the shoulder are neither common, nor are they very rare. They may be seen in the practice of any active surgeon, but few men have accumulated a long list of cases. The condition is a distressing one for the patient, impairs his activity, and keeps him in constant anxiety. Inevitably, surgeons all over the world have been aroused to discover a method of preventing re-dislocation, and at the same time to secure a painless and freely movable joint.

The very variety and number of the operative proceedures which have been proposed to cure the condition is evidence that an infallible method has not been discovered. Laceration of the capsule is inevitable at the time of the first dislocation. Sometimes a piece of bone is torn off from the edge of the glenoid cavity, or from the upper end of the humerus. A fracture of the neck or head of the humerus may have been associated with the original luxation. Sub-

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sequent dislocation must occur through the torn capsule, and ultimately must result in the persistence of an opening in the capsule, or in a decided pouching and relaxation of that structure. It is, however, pretty well established that the stability of the shoulder joint is only in part due to the capsule; the muscles play a much more important part in supporting the head in its socket. It is also well known that redislocation is produced by muscular action in favoring positions of the limb.

Operations to cure recurrent dislocations of the shoulder may be divided into:

1. Operations on the bony structures. Excision of the head of the humerus was done by Kellogg Speed in a case in which a fracture had caused severe distortion. Hildebrandt, in 1902, gouged out the posterior part of the glenoid cavity to deepen it and render the anterior margin more prominent. Oudard and Lenormant, in 1928, split the coracoid process, and lengthened it to produce a bony block to oppose forward displacement of the head of the humerus. Kellogg Speed, and Eden, bored a hole in the scapula near the anterior inferior margin of the glenoid, and drove in a bone peg taken from the tibia to offer resistance to the escape of the head. This is similar in principle to the well known shelf operation at the hip. The resourceful ingenuity of the originators of these procedures must be acknowledged, but I think it may be safely said that none of these bone operations has met with any general acceptance, and are of greater historical than practical interest.

2. Operations on the capsule have been favored by many surgeons. Simple plication, without opening the joint, has been tried by a number of surgeons. Arthrotomy, with imbrication of the edges of the capsule, or with excision of redundant tissue, has been advised by Henderson, by McAusland, and in particular, by T. Turner Thomas. Most operators enter by the axillary route posterior to the vessels, which are retracted forward. Thomas has been an ardent advocate of the posterior incision. Capsular operations are neither simple nor easy, and are yielding in popularity to the next group.

3. Suspension operations to support the head of the humerus. Spitzy attempted to tie the humerus up to the scapula by passing a quadruple strand of stout silk around the neck of the humerus, knotting it in front, and carrying the long ends of the silk up to be secured to the coracoid process; in addition, the capsule was plicated about the silk strands. Clairmont attempted to suspend the humerus by passing a strip taken from the posterior edge of the deltoid muscle behind the humeral neck and suturing it to the coracoid. Carrell, in 1927, carried out an even more complicated proceedure with the same object in view. He cut the long tendon of the biceps, sutured its distal end to the short head to preserve function, and then sewed a folded strip of fascia lata to the proximal part of the long head of the biceps. This elongated tendon was then brought around behind the humerus, and carried up posteriorly to be secured to a hole drilled in the margin of the acromion. Henderson, in 1930, describes an operation of teno-suspension which he has substituted for the capsular operation formerly advocated by him. A long strip, consisting of half the thickness of the peroneus longus tendon, is taken from the leg. This is passed through holes drilled transversely through the acromion above, and the humeral head below. The drill holes in the bones have canulas thrust through them to facilitate the passage of the tendon strip. After the canulas have been removed, the tendon ends are tightened up, and sutured together posteriorly. Three incisions are needed, a longer one posteriorly extending from the acromion downwards onto the head of the humerus, and two shorter incisions anteriorly to expose the acromion process and the humerus in front. This operation has met with wide acceptance, due in part to the unrivalled literary and publicity organization of the clinic from which it emanates, but that it is sound in

principle, and has given very satisfactory results, must be freely admitted. The latest proceedure for the prevention and cure of recurrent dislocations of the shoulder is one described by Nicola.

Nicola exposed the shoulder joint and the bicipital groove by an incision through the deltoid. The muscle is retracted, and the sheath of the long head of the biceps is opened. The incision is carried up through the capsule as far as the edge of the glenoid to render the head of the humerus accessible. The biceps tendon is cut some distance down from the head. The proximal part of the tendon is turned up out of the way, the humerus is adducted and pushed upwards to expose the articular surface, and a large hole is drilled from just below the transverse humeral ligament to the centre of the head. By means of a silk guide the proximal part of the tendon is now pulled through the drill hole from above downwards, and firmly secured to the distal end. The transverse humeral ligament and the bicipital sheath is now sutured over the tendon, the catgut passing through the tendon as well as the edges of the sheath. Finally, the capsule is closed with catgut, the muscle replaced, and the skin sutured.

This operation is comparatively simple and easy; with the exception of the change in position of the biceps tendon the normal anatomy is not disturbed; no secondary incision elsewhere is needed; and the mechanical efficiency of the tendon in its new location as a support to the humeral head is instantly appealing.

Two cases have given me opportunity to employ Nicola's method.

Case 1. Henry Jones, white, aged about 35 years, presented himself with a history of repeated dislocation of the shoulder. On May 28, 1930, I operated upon him by Nicola's method. An incision about 4½ inches long was carried through the skin just to the outer side of the cephalic vein. The interspace between the deltoid and the pectoralis major was opened up, and the bicipital groove identified. The sheath of the long head of the biceps was incised, and the incision carried up through the transverse humeral ligament, and the capsule of the joint as far as the margin of the glenoid cavity. The tendon of the long head of the biceps was sectioned well down towards the muscle, and lifted out of the way. The arm was now adducted and pushed up so as to expose as much as possible of the head of the humerus. With a Hudson drill a large hole was drilled obliquely from just below the anatomical neck towards the centre of the humeral head. The proximal portion of the biceps tendon was now pulled through the drill hole, and continuity of the tendon restored by silk sutures. The tendon sheath, the transverse humeral ligament, and the joint capsule were now closed with chromic gut, the sutures being passed through the tendon to fix it firmly. The soft parts were now closed, and the arm fixed in a Velpeau bandage.

The patient was under observation for several weeks, after which he returned to his home in the country. When last seen it appeared that shoulder function was going to be entirely satisfactory, but it has been impossible to trace him to find out what has been the final outcome.

Case 2. Alton Bergeron, white, aged 40 years, was seen on July 28, 1930, on account of repeated dislocation of the shoulder.

On July 30, 1930, he was operated upon by Nicola's method. The operative details are an exact repetition of the first case. Healing was by first intention. As he was perfectly comfortable he was discharged from the ward on August 1, 1930, but was kept under observation in the clinic for several weeks. A letter from him in April, 1931, states that he is completely satisfied with the result. He has had no re-dislocation, has no impairment of function, no pain, and considers the arm as good as it ever was.

Nicola's method appears to me the simplest, most satisfactory contribution to the surgery of recurrent dislocations of the shoulder so far presented to us, and I am convinced that as time affords the opportunity many other surgeons will join in the chorus of commendation in which as yet but a few have been in position to join.

DISCUSSION.

Dr. P. A. McIlhenny (New Orleans): The extreme disability produced by recurrent dislocations of the shoulder can be truly appreciated only by the man who comes into contact with such patients. They are absolutely incapacitated by reason of their fear of another dislocation, and they labor under a real mental hazard in their attempts at occupation.

A most interesting point is why these recurrent dislocations occur, and it is one that has never been settled satisfactorily. Some authorities claim that the reason is a development defect in the glenoid fossa or the head of the bone,

others think it is due to muscular contraction, still others that it is due to the taking of certain positions in which undue weight is applied, but nobody really can explain the cases in which actual trauma is absent. Some cases have been reported in which the dislocation occurred only when the arm occupied specific positions.

The principal point of treatment is the prevention of the redislocation. In cases seen immediately after the accident, adequate support should be applied and it should be maintained perferably for too long a time rather than too short a time, for the stability of the joint must be assured. As Dr. Fenner has pointed out, there is a marked laxity in these cases, even if a permanent rent is not established in the capsule. If the part is supported in the position of adduction and inward rotation, with the head of the bone in the fossa for an adequate length of time, contractions may have a chance to take place and the recurrent accident may be prevented. It is surprising, as a matter of fact, in view of the osseous instability of the shoulder joint, that more dislocations do not occur.

As far as treatment is concerned, capsulorrhaphy has been practically relegated to the wastebasket. Nobody uses it any more. Only about 30 or 35 per cent of the patients were permanently cured, and fully 30 or 35 per cent obtained no relief at all. The simplest operation compatible with the desired results should always be used around the joints. The treatment today is limited to the operations described by Dr. Fenner, the Henderson teno-suspension and the Nicola operation. Both are undoubtedly satisfactory in producing stability of the joint together with free motion, and both lessen the possibility of re-dislocation in the absence of severe trauma. The desire of the surgeon and his ability to perform the special operation is really the basis of choice, but the Nicola operation, being simpler, seems the wiser for general use.

Post-operative treatment is most important. If we allow free motion as soon as the wound is healed, we are going to have a recurrence. I believe that physiotherapy should be guardedly applied, and then active motion carefully begun, but I am not in favor of passive motions at all. It is much better for the patient to have a limited abduction with gradual increase than to have free motion and run the risk of recurrence.

Dr. Guy A. Caldwell (Shreveport): Since the operations described by Dr. Fenner have been introduced I have not seen a patient with a recurrent dislocation of the shoulder but I expect to follow this procedure in the future. I think muscular incoordination must be an etiologic factor in this condition for recurrent dislocation of the shoulder is of rather frequent occurrence in epileptics. Of the cases I have seen, probably 12 to 14 in all, only 4 were willing to submit to operation and all 4 were epileptics. I did the Clairmont operation in each case and observed 3 of the 4 for at least six months. I would not say it is an ideal operation, but it did satisfy the patients. They went through repeated convulsive seizures without a recurrence but they had appreciable limitation of motion. They could abduct barely to the right angle and they had a serious limitation of external rotation. But they did not have pain and they did not have any recurrence of the dislocation.

How the teno-suspension operations described all stand epileptic seizures I do not know but I shall attempt them in the future. For one thing, the Nicola operation is a much simpler operation than the Clairmont operation which is not simple at all.

Prophylactic measures at the time of the reduction of the initial dislocation are most important for the general practitioner to keep in mind. Epileptic seizures, of course, cannot be prevented but immobilization for a sufficient time after the first injury will be of material assistance. In each of the cases I did not operate on I found that no advice had been given at the time of the first reduction as to the need of keeping the arm at the side and avoiding active abduction until the capsule was well healed. The patients had proceeded immediately to make active use of the shoulder and the dislocation had recurred in all after a few weeks or months. At operating, however, I have never been able to demonstrate a rent in the capsule.

Dr. E. D. Fenner (closing): There is no question but that the best cure for recurrent dislocation of the shoulder is not to let it recur, but the fact remains that it does recur, and that it must be treated. I agree that proper protection of the joint at the time of the first injury cannot be too strongly emphasized.

Bone operations and capsulorrhaphy are, I believe, entirely in the discard today, and the objection to capsulorrhaphy is founded in the fact that rents in the capsule cannot be demonstrated, as Dr. Caldwell has pointed out. If there was a tear in any case I have done, I certainly did not see it.

Suspension operations seem to give the best results, and I think the one should be chosen which the surgeon finds simplest to do. I smiled as Dr. Caldwell said he did not think the Clairmont operation was simple. Nobody else has ever found it simple. It requires two incisions, one in front of and one behind the joint, the strip of transplanted muscle must more or less follow the course of the circumflex nerve and artery, and it is very difficult to get a strip of muscle long

enough to reach up to the coracoid. The Henderson operation of teno-suspension by means of a strip of the peroneus longus requires four incisions, three in the shoulder, and one in the leg. The details of boring the acromion and the head of the humerus, passing the strip through the holes, and suturing it there are very complicated. The Nicola operation requires only one incision, the parts are readily accessible, the operation is comparatively easy of performance, and there is no question of a tissue transplant, which always introduces a problem. Only a few cases have been reported as yet, but the men who have done the operation are enthusiastic about it, and certainly it is both logical and productive of good results.

CHAIRMAN'S ADDRESS.*

LUCIEN S. GAUDET, M. D.,

NATCHEZ, MISS.

Before beginning my address, let me first take this opportunity to extend to each and every one of you my sincere appreciation of the kind assistance and support you have given me in the programme of splendid papers that follow.

Since last we met, much current has flowed over the mill race of time. We have gone through one of the worst financial depressions in history, with its resultant hardships on all, more especially our profession, who as usual has suffered serious financial losses and reduced earnings, but hope the end is in sight, and that we may never be called upon to face the trials and tribulations of another. This is quite a serious problem to us, when we consider that the medical profession donates from 365 to 375 million dollars in this country to free services yearly.

Other problems of vital importance face us. The agitation of the cost of medical care still goes on, with big business and the laity considering the cost of medical care and hospitalization as excessive. It is interesting to know that only 2.5 per cent of our national income is spent for this phase of it. A very small part for payment of health. We spend three times as much for tobacco, twice as much for candy and so on down the line. A continuance of this agitation without some plan properly worked out between the physicians and the public is but one of the stepping stones to state medicine as I see it. This problem is for you and me to think about.

While attending a joint meeting in Vicksburg in December, Dr. Felix Underwood made a statement that should make a profound impression on us, as it is relative to our own health and well being. As I remember, he said that out of 51 physicians called by death in this state in the past year, over 50 per cent died of some form of heart disease and 40 per cent of these cases were under fifty years of age. If this be so, and Dr. Underwood knows, then we are not giving ourselves the proper protection for our health and being, that we advise and expect our patients to do.

Another problem that should deserve our prompt and undivided attention is that each section of the Mississippi State Medical Association should have the right and privilege of selecting it's own chairman each year, and this should not be the prerogative of the president as is now in existence. I have no desire to detract from the president, his privileges and honors, but we all must feel that each section can better judge and pick its chairman and it sounds so reasonable and logical anyway. This is the plan followed in the American Medical and Southern Associations.

There has been mentioned to me by one of our members that it may be wise to consider the organization of an Opthalmological and Otolaryngological Society in Mississippi, and I think some of you should bring up this matter for discussion at this meeting. If this could be worked out, I think it would help to improve this section a great deal in the future.

I feel that it would be amiss to close my address without some mention of the more scientific side of medicine, therefore, I make mention of etiology and pathology as

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relating to our special work, because these subjects have been woefully neglected in the past, and I hope will be somewhat of a stimulus to you to consider these subjects more seriously in connection with your daily work.

Etiology, is you well know, is the study of the causes or causative factors of disease.

Pathology is the study of the functional and structural changes caused by disease.

Pathology is divided into two great groups: Clinical, and medical and surgical.

We have other divisions of pathology as cellular, comparative, functional, experimental, microscopical, special and others. We of this section are especially interested, as we should be, in the clinical, gross and microscopic pathology in its relation to such tissues as tonsil; turbinate; conjunctival, retinal, and choroidic membranes, lining of the sinus cavities and other tissues that are brought daily in our range of vision.

More and better understanding of these subjects will only tend to assist us in arriving at a correct diagnosis in many cases of indecision and perplexity, and thereby broaden our field in doing better work, and with more resultant benefits to humanity coming under our care.

Most of us, after a considerable length of time has elapsed in our work of making diagnosis and prescribing treatment, feel the need of expansion of our knowledge and ability, as we desire to learn more, and for that reason I am dwelling some on these subjects, as they provide us with unlimited opportunity for further studies and more exact knowledge in a somewhat neglected field.

I hope time will bring us such a knowledge.

Heart Murmurs.—A systolic murmur may or may not mean valvular heart disease; a diastolic murmur almost invariably indicates an organic lesion of a valve.—Anon.

HEART DISEASE AND THE DIABETIC.*

I. I. LEMANN, M. D.†

NEW ORLEANS.

The association of diabetes and arteriosclerosis has been a matter of note for a long time. The frequency of gangrene of the extremities in diabetics is notorious. The relation, however, of diabetes and heart disease dependent upon arteriosclerosis, while well known to writers of a quarter of a century ago, did not engage their attention as it has that of the clinicians during the past half dozen years. Indeed, the attitude of the profession toward this problem has entirely shifted. Van Noorden,[1] writing in 1895, said: "Almost all writers agree that diabetics suffer premature arteriosclerosis and are, therefore, liable to all the troubles such as cardiac asthma, and exposed to all the dangers, such as apoplexy, degeneration of the heart muscles, peripheral gangrene, necrotic inflammation, etc., which this condition calls forth. * * * It is a question that calls for careful study in the future whether arteriosclerosis, possibly of syphilitic origin, may not often be the primary disease which is followed later by diabetes resulting from the nutritive disturbances so occasioned in the pancreas or nervous system." He remarked that there were many patients in whom not the slightest cardiac lesion had occurred in one of two directions, namely, hypertrophy and cardiac weakness. The former was attributed to the concomitant nephritis, while the cardiac weakness was attributed to a simple atrophy of the heart muscle as shown in the post-mortem studies of Frerichs. Similarly, Naunyn[2] in the 1898 edition of his work on diabetics commented upon the great role played by arteriosclerosis in diabetes and remarked that it was not

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usually to be regarded as the result of diabetes, but on the contrary, as a cause. It was found only rarely in young individuals dying of severe diabetes, while comparatively frequently in old gouty and mild diabetics, in whom the diabetes was influenced by the accompanying arteriosclerosis. He attributed little value to the influence of the glycosuria upon cardiac asthma and angina pectoris, for these occurred usually in milder cases of diabetes. While he could not deny that cardiac asthma occurred after a long previous existence of diabetes, he pointed out that the reverse is sometimes the case, namely, that asthma or angina appears before the diabetes. He, too, attributed the frequent hypertrophy of the heart to the accompanying nephritis. Joslin,[3] in the first edition of his work in 1916, said: "Arteriosclerosis is of common occurrence in protracted cases of diabetes. It is of the senile type. It seldom occurs even in the severest cases of diabetes in youth or old age, a strong argument against diabetes being a causative factor in arteriosclerosis." "Arteriosclerosis, on the other hand, may play an important role in the production of diabetes." "The cardiac symptoms are more of the order of angina pectoris than of cardiac incompetency." Even in his third edition, published in 1923, he makes the same statements.

The last few years, however, have brought an accumulation of much evidence indicating that diabetes stands in direct causative relationship to arteriosclerosis, and hence to arteriosclerotic heart disease. This new evidence has been made possible by a number of factors. There has been, in the first place, at least in this country, a sudden increase in the frequency of autopsies upon diabetics. Secondly, there have been routine skiagraphic studies,[4] of the extremities of diabetic patients, which have shown the great frequency and extent of arteriosclerosis unrecognized clinically in these patients. To this must be added also the growing realization that the coronary arteries share in the various degenerative processes of the peripheral arteries, such as arterio-sclerosis, Buerger's disease,[5] etc. Of prime importance has been the recognition *intra vitam* of coronary occlusion, an epoch-making contribution of J. B. Herrick[6] and his associates. In recent times have come, too, the electrocardiographic studies[7] of diabetic patients. It must be realized that it is only in the last dozen years that blood chemistry studies have become routine, and they have served to bring to light milder forms of diabetes without glycosuria; indeed, in some of these cases the grade of glycemia has been extremely high. Above all is the role played by insulin in changing many of our former conceptions of diabetes. No longer do the majority of diabetics die of coma, asthma, or tuberculosis. Heart disease now has risen to the first place as the cause of death of diabetics. Death from diabetic coma may now be regarded practically as an avoidable accident. Diabetic patients, even the children and young adults who formerly died within a year or two of the recognition of the disease, now live long enough to permit the diabetes to produce arteriosclerosis. Shepardson[4] has shown how frequently the latter is in individuals so young that there could be no doubt of their having entered prematurely the zone of the usual senile arteriosclerosis. Joslin's[8] latest statistics show a drop in the mortality due to coma from 61 per cent in the Naunyn era to 11 per cent in the last 781 cases who had died in the previous 4 years. Correspondingly, the average age of the diabetic at death had risen 1 year each for the last 16 years so that it was 60 years in contrast to 44 years previously. Very striking is the fact that when Joslin's fatal cases were studied with regard to the locality of the arteriosclerosis, the heart was found to be the most frequent site (19.1 per cent) of the total mortality; the legs were the next (13.2 per cent), as evidenced by gangrene; far less the brain (7.2 per cent); and least of all, the kidneys (4.7 per cent). Joslin

found: "If the duration of diabetes is less than 5 years, arteriosclerosis leads to 30 per cent of the deaths, if it is from 5 to 9 years, 44 per cent of the deaths, if 10 to 14 years, 53 per cent, if 15 to 19 years, 60 per cent, and 30 years or over, 68 per cent." He, too, stresses the fact that even children have arteriosclerosis as shown by calcification of the arteries in the legs, demonstrated by the roentgenogram. He reports a young diabetic woman in her early twenties who died of angina, and 2 other patients, 33 and 30 years of age, respectively, who died of angina and coronary thrombosis, the lesions being demonstrated by post-mortems.

The statistics based upon autopsies are most impressive. Actual thrombosis with infarction of the heart has been present in 25 per cent of 100 autopsies of diabetic subjects at the New England Deaconess Hospital. Warren,[9] in 282 autopsies on diabetics, found 35 cases of infarction (12.4 per cent), and he quotes Nathanson, who found extensive coronary disease in 52 per cent of the diabetics above 50 years of age, as against 8 per cent in general autopsy material. Warren also contrasts his findings with Ophul's report of 3000 autopsies in which only 26 cases of infarction were found, and also with Benson's series of 1750 autopsies (coroner's cases and containing many cases of sudden death) with 72 cases of infarction (4.1 per cent).

Root and Graybiel,[10] in their recent report from the Joslin clinic of 210 cases of angina in 7000 cases of diabetes mellitus, pointed out that this incidence, so markedly exceeding the incidence of angina in a general hospital population, was an indication of the specific influence of diabetes. A further indication was afforded by the sex ratio. In the 210 cases, 122 were males and 88 females, in contrast to the usually much greater proportion of males. "Such a leveling influence on the sex incidence would be expected since the incidence of diabetes is nearly the same in the two sexes."

In a series of 588 diabetic patients above the age of 21, I have observed 44 patients wtih evidences of heart disease. These 44 patients I have classified as follows:

TABLE I.

1.	Patients with angina or coronary occlusion	15
2.	Patients dying suddenly a cardiac death but without pain	1
3.	Patients with arhythmias without congestive heart failure	9
	In this group are included 4 patients with ventricular ectopic beats, 2 patients with auricular fibrillation, and 1 patient with heart block.	
4.	Congestive heart failure with valvular disease	9
	One of these had auricular fibrillation, one ventricular ectopic beats.	
5.	Congestive heart failure without valvular disease	10
	Two with ectopic ventricular beats, one with auricular fibrillation, and two with bundle branch block.	
6.	Patients with heart murmurs, without arhythmia and without evidence of congestive heart failure	2

My records include 52 patients (diabetic and non-diabetic) with angina or coronary disease. It will be noted that 15 of these 52 had glycosuria at some time not in connection with their seizures. Thirteen of them were definitely diabetic. The other two were Jews with transient glycosurias and with the history of definite diabetes in the family. Both of these patients were obese. One of the 2 has a definite syphilitic history. He had, several years ago, and following some minor anginal attacks, a very severe coronary occlusion characterized by status anginosus, pericardial rub, crepitant rales, slight elevation of temperature, leukocytosis, and typical electrocardiogram. Subsequent to this, he has suffered from congestive heart failure. Another of the 15 had similar definite evidence of coronary thrombosis. One other patient, after a number of years of frequent attacks of angina, died, aged 46 years, in a status anginosus lasting several days, and I have no doubt that we were dealing here also with a coronary occlusion. Table 2 shows the age at which each of these patients de-

veloped diabetes, angina, and the age at death.

TABLE No. 2

Patient No.	Diabetes discovered at age of	Angina or coronary occlusion at age	Age at death
3321	46	51	51
104	48	71	73
3824	39	51	Living?
2710	49	57	57
2434	50	55	60
2698	50	55	Living
1546	67	77	80
3917	50	58	58
2854	60	60	60
3045	50	50	Living
1510	33	43	46
145	46	64	64
3872	50	53	60
3090	66	70	71
1788	44	52	Living

In group 3 there are 3 patients to whom attention is to be directed because there is very definite evidence of myocardial disease. Patient number 3023, whose diabetes was discovered at the age of 63, had both legs amputated within a few months in his 74th year. He subsequently, at the age of 77 years, developed a partial heart block which persisted to his death at 78 years. A very interesting observation was that while he required 18 units of insulin with a diet of C 100, P 40, F 150, at the time of his amputations, he required no insulin at all and had a normal blood sugar value during the last 6 months of his life. Patient number 3062, aged 69 years, whose diabetes was discovered at the age of 60 years, and patient number 1414, aged 50 years, whose diabetes was discovered at 44 years, had auricular fibrillation causing them relatively little trouble.

The patients with congestive heart failure are of particular interest because of the suggestion, notably in the German literature, that insulin is dangerous in such cases. Middleton and Oatway[11] refer to the experience recorded in the literature. Gigon's patient with cardiac decompensation had died after 3 doses of insulin. Rhinewein's 2 similar patients had improved after the withdrawal of insulin. Nicely and Edmondson had 2 patients in whom decompensation attended the administration of insulin. The diabetic heart utilizes sugar, which is the chief source of food and energy, less well than the non-diabetic heart. It is only after the addition of insulin that the diabetic heart is enabled to utilize sugar normally. These statements are based upon definite laboratory demonstrations of perfusion of isolated hearts. If insulin is given to the point where the blood sugar is lowered below the normal, the diabetic heart is still further handicapped because of the lack of available sugar. It may then, because of this handicap and the further handicap of inadequate coronary circulation, suffer in its efficiency and decompensation might result. Such is the theory upon which objections to insulin therapy in serious heart disease and particularly in the presence of decompensation are based. My own experience runs entirely counter to this statement. In general, those patients in whom it was possible to carry out the proper regimen for the cardiac disease were helped by insulin. In no case where insulin was administered was there any symptom or lack of improvement that could be attributed to the insulin. Patient number 2374, with auricular fibrillation and congestive heart failure, whose diabetes had not previously been recognized, went into diabetic coma. She was rescued by insulin. A day or two after she was rescued she went into insulin coma from which she was promptly brought back by the immediate injection of glucose into a vein. There was no unfavorable action upon the circulation caused by this very definite hypoglycemia.

Granted the etiological relationship of diabetes to arteriosclerosis and to arteriosclerotic heart disease due to coronary affection and subsequent fibrous myocarditis, we may inquire as to the pathogenesis. Evidently the arteriosclerosis is not related to the severity of the disease nor to the grade of the glycemia. Attention had already been called to this by Naunyn, van Noorden, and Joslin. None of my 15

diabetics with angina and coronary disease was a severe diabetic. Patient number 104, whose glycosuria I discovered in 1906, when he was 48 years old, died in December, 1930, when he was 72 years. I was able to follow him throughout the 24 years. For the most part, his glycosuria and glycemia were controlled by very moderate restrictions of his diet. For the last 5 years of his life he had taken small doses of insulin, 6 to 10 units once a day. His blood pressure had never been elevated, usually about 120/60. His blood sugar in April, 1930, was 105. He had had fleeting, stab-like pains in the precordium and the left forearm, never lasting more than a few minutes, in the spring of 1929. He complained no more of this until he died in his first severe anginal attack. Patient number 3023 came to have a normal blood sugar without insulin after he had lost both of his legs and had developed double cataracts and heart block. The fire was out as far as the metabolic need for insulin was concerned, but in its previous raging it has done widespread damage. If arteriosclerosis is produced by diabetes, this production is to be correlated with the duration of the diabetes rather than with severity. The figures of Joslin and Root are quite impressive upon this point. A number of writers have referred the arteriosclerosis to the effect of the high blood fat. Aschoff,[12] in developing an earlier idea of Virchow, has become strongly convinced of the validity of the imbibition theory of arteriosclerosis. The high blood fat, taken up by imbibition, injures the intima of the vessels. He believes that this process is not only avoidable but reversible. According to this theory, therefore, we should be as much interested in the high blood fats as in the high blood sugars of the diabetic. Indeed, some believe that we can more nearly check the faithfulness of diabetic patients to their diet by blood fat estimations than by blood sugar estimations. The general trend of the times is toward low fat diets rather than toward high fat diets.

There is, too, the implication as to the prognosis of the diabetic. If, by diet and insulin, we can keep hypercholesteremia in control, we may have high hopes of preventing arteriosclerosis. We have not, however, at present, evidence to show that inadequately treated patients are more prone to arteriosclerosis than are those adequately treated. We shall probably know more of this in the future when blood fat estimations are more common. Also, we must remember that inadequately treated patients may not live long enough to become arteriosclerotic.

Finally, a word may be said as to the great desirability of a liberal carbohydrate diet, in old diabetic patients at any rate. The diabetic heart not only utilizes blood sugar poorly, but seems to require the presence of an excess. Some sudden deaths, apparently from heart failured associated with hypoglycemia, have been reported.

SUMMARY.

Whereas formerly it was debated whether arteriosclerosis produced diabetes or diabetes the arteriosclerosis, the cumulating evidence of recent years would seem to indicate that arteriosclerosis is the result of diabetes. There is reason to believe that it is caused by the high blood fat. Hence, when this latter is controlled by proper diet and insulin, there is hope of avoiding arteriosclerosis and arteriosclerotic heart disease.

The coronary arteries share in the degenerative processes of the peripheral vessels. Therefore, angina, coronary occlusion, and fibrous myocarditis are found frequently in diabetics as in other arteriosclerotics.

Caution is to be used in arranging diets and insulin for older and arteriosclerotic patients. Abundant carbohydrate must be provided and hypoglycemia avoided.

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DISCUSSION.

Dr. George Herrmann (New Orleans): Dr. Lemann has again brought to us some very important clinical pathological observations. He has emphasized the necessity of the study of the patient as a whole rather than one specific disturbance for which the patient might present himself.

He has brought to us again the fact that patients with various types of diseases are being saved from acute chemical destruction only to fall victims of heart disease. There may be a bit of morbid gratification to those especially interested in cardiovascular disease in such data, but there is something more than that to intrigue us. There may be, in these disturbances which Dr. Lemann described, some clue in the mechanism of the degenerative diseases from which so many of our patients now go to their end.

Dr. Lemann has pointed out the chemical relationship of the metabolic disturbances in the diabetic to the arteriosclerosis. He has accepted the lipemic theory of Aschoff as the best explanation of vascular degeneration in the diabetic. There is certainly a good deal in favor of this theory in that the vessel walls, when examined carefully, show masses of atheromatous plaques that are loaded with cholesterin. It seems quite logical that cholesterin must play a part in the arterial sclerosis resulting from prolonged diabetes. There are some who feel that the increase in sugar is the factor indirectly, in causing the disturbances of fat metabolism.

The younger diabetics that have arteriosclerotic changes make up the group that is most significant, I think. In these there is pretty good evidence that the diabetes is definitely responsible for the vascular changes. Fathermore, the vascular changes are similar to those of senility except that they have progressed much more rapidly. The patients show in the atheromatous plaques a great deal of calcium deposition and often calcified rings. The arteries in the periphery, when thus affected, show the goose trachea corrugation. Such changes suggest that the calcium may play a part also in the arteriosclerotic change of diabetes.

Protein has not been very definitely incriminated except by those who report that they have produced arteriosclerotic changes with proteins. We know that there are oxidative changes in diabetics. Dr. Lemann has mentioned such relation to insulin which contribute to changes in the organs that demand perhaps the greatest oxygen supply. Joslin's figures have been quoted showing the heart most commonly involved, which merely emphasizes the fact that perhaps the oxidative demands and changes have perhaps a great deal to do with degenerative sclerosis.

Those who have argued for the use of high fat diet in diabetes insist that the lipemia disappears when the high fat diet is given, just as it does when any other measure that controls the diabetes. That has not been corroborated, but it has been shown that the lipemia is commonly present in starvation as well as in diabetes. Another argument is that the appearance of lipemia is merely a secondary factor showing that there is no available burning material in the blood stream to be used, thus further emphasizing the disturbed oxidative processes which are present in the circulatory system as well as in the organism as a whole.

The older group of diabetics that Dr. Lemann has mentioned are interesting in that they are mild diabetics, and the figures he has quoted, tend to show that the longer the diabetes has been present the more severe the arteriosclerotic changes. The ages however, bring these patients into the group in which arteriosclerosis is important. They have been saved from coma to be carried on to the sixties and seventies where the arteriosclerotic processes take place. Is the degree of arterial change greater in these because of the disturbances in sugar metabolism, than it is in the general run of the aged?

We have hypertensive cases with or without arteriosclerosis, without renal changes, that show poor tolerance for carbohydrates. Are those patients mild diabetics?

When Mills of Cincinnati was here visiting our wards, we showed him several of that type of patient with hypertension as well as sclerotic

changes and glycosuria. He insisted that the picture was one of disturbance of adrenal secretion and not diabetes mellitus. Most of such patients had a mild intolerance for sugar. Would they go on and have more rapidly advancing sclerotic changes than the ordinary essential hypertensive case does?

Dr. Lemann has emphasized the treatment of the diabetic with a diet that is not rich in fat but one that has considerable carbohydrate present. He has not said that the diet should be restricted in protein content. The high carbohydrate intake is to be made available because of the necessity for glucose in the adequate functioning of the aging heart as well as the youthful heart.

He has not gone into detail concerning the treatment of the cardiovascular disturbances. In most of the patients I am sure treatment is directed primarily toward the alleviation of their cardiovascular disease, occasionally, however, the reduction of blood sugar relieves cardiac pain. The diabetes mellitus in general plays a relatively minor role as the age progresses, and usually patients can be relieved of their cardiac pain when it appears by the same measures that we use in patients who do not present evidence of diabetes, that is, the vaso-dilators that are so commonly used at the present time.

One point I wanted to restate is the fact that these mild chronic diabetic patients are prone to cardiovascular changes must not be lost sight of. That is, even though they do not present outstanding evidence of cardiovascular disease they should be considered potential cardiac patients. Occasionally the examination will reveal a little suggestive evidence on which we can say definitely the patient does have cardiovascular damage. We should however, even in the absence of evidence, consider them potential coronary occlusion patients. The electrio-cardiographic study may show changes at a time preceding their appearance in the clinical examination and therefore such a study is indicated. We are indeed deeply indebted to Dr. Lemann for presenting this important study and thesis to us in his usual clear forceful, scientific way.

Dr. A. A. Herold (Shreveport): There are a few things that Dr. Lemann brought out which are of considerable interest, and one of the things is the arteriosclerotic changes which are shown in these heart conditions in diabetics usually come before advanced age. Heretofore we have been accustomed to treat these older diabetics, when not very severe, without the use of insulin but by dieting. Now, with the knowledge that the high fat diet causes arteriosclerosis, especially with Joslin's suggestion of cholesterin in the blood, due to overfeeding of egg yolks perhaps, we are afraid to depend entirely on diet and have to resort to insulin.

As an instance of that, I have a patient I have had under observation for about twelve years with diabetes and a heart condition, and he has arteriosclerosis of his extremities, as they so frequently have. Every time he gets an attack, I have been in the habit of putting him to bed, restricting his diet and giving him insulin for a short time. His blood sugar goes back to normal and he get along nicely for several months, or perhaps a year, on a diet. Now, since we fear too high fat diet and give more carbohydrates, it doesn't seem to be practical. I had occasion to see him a couple of months ago with a renal colic. I found his blood sugar quite elevated, although he didn't know it. He has been on insulin ever since. I have been afraid to take him off. He is sixty-five years of age.

Professor Bloor, quoted by Joslin so often, has been trying to bring this point of blood fats to the front in treating diabetes for a number of years. I think we are just beginning to realize it. I want to emphasize its importance, as suggested by Dr. Lemann.

Dr. A. C. Eustis (New Orleans): It might be well, however, to mention, in connection with diabetes, that patients recovering from diabetic coma may have degeneration of the cardiac muscle, often go to fatty degeneration. We know there is severe toxemia in diabetic coma, and its effect on the heart must be considered.

This was very well brought to my attention many years ago, before the advent of insulin. We managed to pull a young high school athlete through a diabetic coma. He was doing well three days afterwards. He thought the room was too warm at Touro, so without ringing the bell for the nurse, he jumped out of bed and attempted to open the window. It was rather difficult for him. He fell over in marked dyspnea and died in about an hour from acute dilatation of the heart.

We can learn from that, that in cases recovering from coma it is well to caution your patient not to overtax his heart.

Dr. A. E. Fossier (New Orleans): There is one little point I want to bring out and that is wherever you find a case that might have a large percentage of sugar in the urine, and even thoracic pains, pains anginal in character, do not make a diagnosis of coronary trouble due to the diabetes unless you have taken the time to make a correct diagnosis. I have seen these cases, although they are not frequent. There is one I have in mind particularly.

About two years ago I saw a man who had a large amount of sugar in his urine, and a high

blood sugar. That individual was a sugar drunkard. I have used that expression very frequently for people who have a liking or a tendency for sugar, like another man has for alcohol. A man cannot pass a confectionary shop without stopping to buy a confection. That individual developed pains in his chest as typically anginal as you would want to see, with a fever and a feeling of terrific pain, and also a feeling of compression sometimes in one side. This is not typically anginal. He thought himself that he had angina. Afterwards he had the pains in various portions of the body, in the calves of his legs, and so forth.

On examination of this individuol, a man in his fifties, I didn't find anything wrong. Repeated electrocardiographic examinations showed him to be normal. We kept him under observation for a few days before reducing the sugar. I have seen this man in his attacks. The intercostal muscles would become cramped. You could feel the muscles cramped like other muscles of the body. Here was a cramped condition due to the sugar. Upon reduction of the carbohydrates and sugar in the diet of that individual, his sugar disappeared over night and he never had a recurrence of that pain.

Here was an individual that I thought was absolutely a case of angina, and of course with a background of diabetes you would say that would be a confirmation of that diagnosis, but it was a cramp of the intercostal muscles that simulated that. I am only giving you this thought because you may come in contact with similar cases. They are not frequent, but I have had them. They have been a help to me especially where the electrocardiograph showed them to be normal.

It is a strange thing, I am not saying this in any way to deter from the use of insulin, or for it, that the mortality of diabetes has increased in the past ten years. The statistics of New York City for the last thirty or forty years will show that it has increased a great deal in the past ten years. The thought comes whether the incidence of the disease has increased or whether the mortality has increased. These death rates were taken from New York City. The claim is made that it has decreased all over the country except for New York.

Is it a better diagnosis? I don't know. Is it better than it was the previous ten years for the diagnoses most frequently made? I cannot say. I do know that the statistics show the death rate has increased. I wonder whether the increased sugar consumption which we have had since the time of prohibition, while it has not reduced the alcoholic consumption, at the same time the people are taking more sweet drinks continually, and a large amount of coffee with three or four spoonfuls of sugar five or six times a day, is not an etiologic factor in the increasing diabetes we have. I don't know; it is not determined, but it is a study for someone to take up.

Dr. I. I. Robbins (New Orleans): There is very little I can add, but from my small, limited experience and the few cases of heart disease that have complicated diabetes, I think the point should be re-emphasized that all cases of cardiac disease, and I have particular reference to those that deal with angina pectoris and coronary thrombosis, must be treated for their cardiac condition.

I have had several cases under observation, and they have been seen by other men in town, whose diabetes was controlled quite well. Vascular remedies to increase the coronary dilatation were employed. Only at such times was the patient able to be given any sort of relief.

I think we must not forget the fact that whether the diabetes causes the arteriosclerosis or not, once the arteriosclerosis has been brought about and the patient does develop angina pectoris or coronary disease, that must be treated in the same way as the angina pectoris of non-diabetics.

I would also like to ask Dr. Lemann if he has any figures on cases of arteriosclerosis non-diabetic in origin, as regards the blood sugar values and the fat values.

Dr. I. I. Lemann (closing): Most emphatically, of course, diabetics who have developed heart disease should be treated for their heart disease, whether that be coronary disease or congestive heart failure. I would like to emphasize the fact that insulin is not dangerous in the diabetic who has developed heart disease. I would also like to call your attention to the fact that in the treatment of angina it has been proposed to use glucose intravenously, which merely emphasizes the point I made in the paper that the heart, handicapped by arteriosclerotic coronary disease, needs an excess of glucose and should not be still further handicapped by pushing the insulin to the point of hypoglycemia. I would like to answer, too, the point just made by Dr. Robbins, namely, as to the possible disturbance from a metabolic standpoint of the patients with non-diabetic arteriosclerosis. I think the message that has been brought to us by these men who are interested in the study of arteriosclerotic heart disease of diabetics is an encouraging message with regard to non-diabetics, because if we are on the right track about the production of atheroma in diabetics by high blood fats perhaps we may be on the right track also in the study of arteriosclerosis produced in patients who are not definitely diabetic. One of the speakers (I think it was Dr. Hermann) referred to patients with hypertension, about whom there was some question as to wheth-

er they were definitely diabetic. It may be that those are potential diabetics. It may be that there is a background of metabolic disorder which in one patient takes the direction of hypertension and in another one the direction of a definite diabetes. Certainly obesity gives us another hint. Obese patients are much more likely to be arteriosclerotic than the thin ones, I mean prematurely arteriosclerotic, and are much more likely to suffer from arteriosclerotic heart disease, from angina and the like. It is a hopeful aspect, then, to which I wish to direct your attention, of the degenerative processes of the cardiovascular system. I have no figures, such as Dr. Robbins asks for, with regard to the blood chemistry of arteriosclerotics. I quite agree with him that this is a rich field for investigation.

SOME OBSERVATIONS WITH DICHLOROBENZINE TERPENOLIC COMPOUND VAPOR IN HEMOPTYSIS.*

EMILE A. BERTUCCI, M. D.,

NEW ORLEANS.

The inhalation method for the treatment of diseases of the respiratory tract had been instituted by rhinologists and laryngologists long ago where a direct application of medicinal agents may exert their influence wherever indicated. Such remedies as the compound tincture of benzoin in the treatment of acute laryngitis and spasmodic croup has been widely known and used by the profession for years and by the specialists as an old reliable remedy and inhalant in these conditions. Creosote and alcohol inhalations in bronchiectasis had its advocates until recently replaced with intra-tracheal injections of lipiodol. Even up to a few years ago the inhalation of chlorine gas for the acute respiratory infections had stirred the nation, but had its disadvantages in the danger of overdose and subsequent irritation of the respiratory passages and finally is now practically obsolete. However, the compound tincture of benzoin and menthol and vapor inhalations still hold a place for the relief of laryngeal and bronchial inflammations of the catarrhal type even up to the present day.

No therapeutic agent has ever been offered via the respiratory route as a preventative for recurrent pulmonary hemorrhages of the tuberculous type. It was during some research in pulmonary tuberculosis with dichlorobenzine compound that I happened to observe a series of hemorrhagic cases under such treatment that brought a new field of investigation in this particular type of case and which attracted my attention very eagerly. However, before entering upon the purpose of this paper, I will briefly summarize the causes of hemoptysis in general.

(1) Hemoptysis of the pure tuberculous type, from tuberculous lesions within the lung.

(2) Certain diseases of the lung, pneumonia (initial stage), cancer, gangrene, abscess, and bronchiectasis.

(3) Heart affections, particularly mitral lesions.

(4) Ulcerative affections of the larynx, trachea, or bronchi.

(5) Aneurism.

(6) Vicarious hemorrhage (rare).

(7) Recurrent hemoptysis in arthritic subjects.

(8) Malignant fevers and purpura hemorrhagica.

(9) Endemic hemoptysis due to a parasite, the distoma pulmonale, or bronchial flux, an affection confined to parts of China and Japan.

(10) Diaphragmatic hernia (rare but possible).

Considering these causes we should never lose sight of the fact that about 86 per cent of all cases of hemoptysis are tuberculous and occur in from 60 to 80 per cent of all cases of pulmonary tuberculosis, more frequently in males.

The primary cause of a tuberculous hemoptysis, as we all know, is a bacteriological one, viz: the invasion of the tubercle bacillus, which causes a hyperemia of the lung tissue. Again, a perforated

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blood vessel at the seat of the tuberculous focus may cause a severe hemorrhage. Alteration in blood coagulability due to a deficiency of fibrinogen in the blood plasma, improper dissolution of the formed elements, which in turn produces a delayed action of thrombin upon the fibrinogen by virtue of an improper chemical affinity of the nucleoproteins and the calcium salts in the blood, and lastly a deficiency of calcium salts in the blood itself. All these factors predispose the tuberculous patient to hemorrhage. The indications in the treatment therefore primarily lies in restoring the blood chemistry to normal, the relief of the anxiety of the patient, and a psychological stability that will lessen nervous apprehension. This will encourage the patient on the road to recovery, by keeping this apprehension at its lowest ebb so that the element of hope may gain a foothold which is so very necessary in every tuberculous case. This element of hope becomes shattered when any bleeding from the lungs occurs during the progress of any treatment. The patient despairs from the first and certainly needs to be strongly reassured. Death is rarely due to pulmonary hemorrhage *per se* except in a few cases where a large blood vessel has been eroded.

The problem of respiratory medication in the treatment of pulmonary tuberculosis whereby an agent could be found that was harmless to the delicate network in the lung, was adapted in the form of a vapor that would penetrate far beyond the finest bronchioles and even reach the alveolar cell.

Dichlorobenzine, on account of its remarkable penetrating effect and at the same time antiseptic character, formed the basis of the formula. I then sought to place with it, volatile substances that would be carried directly with it, so here I added the oil pinus pumilio which was emulsified with the basis principal, viz: Ortho and para dichlorobenzine. This basic principal is a dichlor derivative of the hydrocarbon benzine series found in coal tar having the formula $C_6 H_4 Cl_2$. Other constituents of the oil are pinene, bornyl acetate, phellandrene, cadinene, limonene, and dipentine. Specific gravity of this oil should be .935 and does not contain any methyl alcohol, but consists largely of terpenes. It is non-toxic and non-irritating in any of the dilutions and even in very concentrated form has no local effect on mucous membranes, as experiments on normal rabbits and dogs revealed. Having obtained this information on animals in various dilutions of the formula, I then began to use it on humans.

Twenty-five cases with positive pulmonary tuberculosis and postive sputum, five of which were recurrent hemorrhagic types with bleeding on an average of every two to three months were treated with success. The remaining twenty cases which had blood-tinged sputum in greater or lesser amounts ceased to expectorate blood after its use. A series of ten controls were employed in the experiment.

Its action was due to hemostatic effect as determined on the ear veins of rabbits. In this experiment, hemorrhage ceased naturally in 12 minutes, and after the vapors were applied reduced the time from 12 to 4 minutes in controls. The terpene content was in turn responsible for its hemostatic effects as again determined by experiments with various agents containing no terpenes.

Vaporization can either be effected as a dry or a moist form. The dry form of vaporization was effected by means of simply steaming the pure formula in a vessel regulated by heat and the volatilization taken up by the patient by direct inhalation of the dry vapor. The moist form which was used consisted in passing steam through the preparation and allowed to carry off with it those volatile agents that were volatilized at this temperature. A special vaporizer consisting of two containers, an upper and a lower in which the upper contains the chemical and the lower,

water. The amount of chemical, however, should not exceed one-third the capacity of this container. A small pipe one-eighth inch in diameter forming a horseshoe curve coming from the lower one ended one-half inch from the base of the upper. A check valve in the lower pot was placed to prevent siphoning through. The water level in the lower compartment should not exceed two-thirds full, heat should be applied by means of a hot plate or gas burner, and the vapors will be emitted in a steady stream and directed near the patient.

Disappearance of blood from the sputum was accomplished by this method after a short time. Inhalations should be given every four hours at first, then gradually lengthening the intervals until the patient could take one or two a day, duration of about half an hour. It was found that under this regime there was no further return of hemoptysis.

Blood and urine analysis were made and the blood pressure taken at various intervals during the course of treatment to determine any alterations, and it was found that the blood showed an increase in coagulability, a slight increase in percentage of hemoglobin and a slight increase in the red and white cells in general.

According to some researches conducted in 1889 by Bremond and Hénocque, the internal administration of turpentine in therapeutic doses increases bodily oxidation and improved nutrition. Urinalysis was negative for albumin or casts. Blood pressure taken at different intervals showed that it remained stationary or a tendency of a slight increase of 5 to 10 mm.

In the treatment of hemoptysis by the vaporization method I wish to emphasize a point, in that in all acute hemorrhages from the lung the situation should be met with at once by our standard methods such as absolute rest and opiates until the acute stage has passed and a diagnosis can be made before resorting to the inhalation method. After a positive diagnosis is made of tuberculosis the vaporization can be given immediately for the further control of recurrent hemorrhage.

The problem of recurrent hemorrhage has always been the problem the phthisiologists had to combat against the mental and physical welfare of the patient, so in resorting to an agent which will almost assure the patient that he will have no more recurrent hemorrhage I believe is a step forward in the advancement of science in this particular type of case. Nothing discourages both the physician and patient more than to have a hemorrhage occur in the midst of what may seem to be an improved clinical condition. Whatever method of treatment used by the phthisiologists whether it be with specific biologicals or natural methods I believe it will add a valuable adjunct in any form. There are no contra indications in its use and can be used with impunity and with safety.

In so far as its action on the tubercle bacilli and on the tuberculous process, I am not ready to make any reports as yet. In conclusion, hemoptysis, or the spitting of blood, fortunately has brought many a patient to the doctor earlier than any other symptom of any of the outstanding chronic diseases. Many a case of chronic pulmonary tuberculosis may go along for months and cause no alarm to the patient until he discovers blood in his sputum. He must then see the doctor at once to ascertain the nature of such blood, and this creates in that patient an anxious attitude which his physician must cope with in order to assure him of the importance of proper treatment and subsequent care. When the practitioner meets with such a case he immediately suspects a tuberculous condition until he can rule out any of the other possible causes, and until the diagnosis is made he must seek to relieve the condition as early as possible by the usual methods. Therefore, I believe that, if we can eliminate the possibility of hemorrhagic tuberculosis of recurrent type by whatsoever method, we would have made a

great step forward in the advancement of therapeutics, and I believe we will also open the avenue for further research in combating the disease itself.

CONCLUSIONS.

Dichlorobenzine compound, non toxic, non irritating, offers a valuable aid in hemorrhagic tuberculosis and does not interfere with any of the standard treatments now used to combat this disease.

DISCUSSION.

Dr. W. J. Durel (New Orleans): Of course the question of hemoptysis is a broad one. As far as saying anything about this method of treatment, I know nothing about it. I would like to ask Dr. Bertucci if that is the same vapor they used in my old sanitorium.

Dr. Bertucci: No, doctor. This is a white preparation and the other is black.

Dr. Durel: Fortunately for us, hemoptysis does occur in some tuberculous patients because we can treat them when they do have hemoptysis. That is probably the best thing that can happen to tuberculous patients, because we know that in about ninety-eight per cent of the cases with hemoptysis they will cure themselves without any treatment. There is no doubt about it if the doctor doesn't come there and make too much of it. In other words, ninety-eight per cent of hemoptysis will cure themselves. The patient will spit blood and it will be all over. That is our experience when we had quite an extensive number of cases.

There is one word I want to say about the treatment. Don't give morphine. One dose might be sufficient, but do not repeat the administration of morphine. We have noticed that since we have done this we have curtailed the post-pneumonic complication of hemoptysis, and that is the real danger of hemoptysis. By giving morphine repeatedly you are checking the bronchial reflexes causing secretions in the bronchial area, and you have a backing up gradually in the vesicular area a great amount of absorption of this toxic matter, and of course greater toxicity and greater chances of toxic pneumonia which is the chief cause of permanent hemoptysis. Again I say it is purely a symptomatic treatment.

One thing we have noticed recently that has helped our hemoptysis patients a good deal is a large dose of Epsom salts. Years ago that was brought to my attention by one of my audience. I used it empirically until recently I saw an article by some professor in Milan. It is mechanical, of course. You displace the arterial tension in the abdominal area and that displaces and decreases the pulmonary pressure and gives a chance for coagulation.

As far as vapors are concerned, I think the less you bother the patient the better it is. As far as the results of this, there have been about as many treatments for hemoptysis as there have been patients.

Dr. W. H. Seemann (New Orleans): I think this paper of Dr. Bertucci is very timely, and while I do not practice phthisiology I am very much interested in the subject.

I happen to be connected with the national association and our local association here, and of course anything that will give us improvement in our handling of tuberculosis is a matter of great interest to me.

I had an opportunity of serving the Charity Hospital as intern, and I went out on the ambulances. Since then I have had a very large general practice before I began to do preventive medicine and laboratory work, and I have had opportunity to see a great many hemorrhages. I visited several large institutions for the treatment of tuberculosis, including Government institutions, and it is my opinion about pulmonary hemorrhage in tuberculosis that the patient is going to die right now or is going to get over it; I mean with possibly one or two per cent of error.

I am glad Dr. Durel mentioned this Epsom salt proposition. I had occasion to know it was used for a great many years. The theory of its use is the elimination so that the patient may get rid of any extra load he may have to carry, at the same time using magnesium sulphate as a sedative action.

I want to emphasize caution in the use of morphine. Morphine will tie up excretions which will prolong illness and post-hemoptic temperature and induce a hemoptic pneumonia.

There is one thing about the inhalation method that I am most interested in, as one of the advisers you might say to the public in my official capacity: the danger of people believing they have a cure for tuberculosis in one of these humitoriums.

I am very glad Dr. Bertucci especially mentioned the fact that he claimed no curative action up to now on the tuberculous process. The A. M. A. and our national association have sent men down here to investigate certain institutions where fuming processes are operated. I know some very excellent men who told me wonderful results had been achieved in these places. Unless you have a parallel series under the exact environment and dietary conditions you can't evaluate any treatment like that. This fumigation business is older than chloroform. It was in England in the operation of one of these places that different gases were used and the anesthetic value of chloroform was ascertained in the therapeutic hospitals.

I want to add to the caution which I believe is in Dr. Bertucci's paper, that he simply regards this as a therapeutic addendum to the armamentarium, and not as a cure for tuberculosis.

Dr. J. G. Dempsey (New Orleans): When tuberculosis or cancer subjects are discussed, particularly tuberculosis, I do believe we should be ever ready to encourage an attempt to do something for tuberculosis. I congratulate Dr. Bertucci in his efforts. He has been trying to do something.

The experience I have had with pulmonary tuberculosis and pulmonary hemorrhages dates back to the War. During that time I was assigned to a service in the southern part of France when women and children prisoners were brought in from Germany over the Swiss border into Avignon. They were herded into the casino just like a lot of animals, many having been two and three years in prison. The women and children had pulmonary and other hemorrhages, the cause of which we were unable to determine. Our attempts to diagnose at the time were rendered more or less vague but still we treated them on general principles.

Some of them were almost in a comatose condition. We unhesitatingly administered one dose of morphine, and it was a good dose. We unhesitatingly introduced a stomach tube and had a funnel with a solution of Epsom salts almost concentrated, and poured as much as a pint into the stomach. Where there were two or three or a hundred of those unfortunates we couldn't spend much time with them, but proceeded right down the line. To my great surprise (there were some in a serious condition) they showed some signs of reacting. The color of the skin cleared up and some of them became decidedly white.

Those patients remained there for thirty-six or forty-eight hours until we were able to move them. They were carried down to the hospital of which I had charge. There wasn't much to be done except give them rest.

At that time in St. Etienne, in the southern part of France, there was an inhaler that they were very anxious for us to use. We had a hospital for tuberculosis, so I gave it a trial. They were using the arsenical fumes. They had a contraption not exactly on the order of the one described. Although very thorough, the French are frequently elaborate. Instead of apparatus that we might concentrate in a two-by-four space, they have an enormous affair requiring perhaps fifteen by thirty feet. I tried it on a few cases. Over those that died I held autopsies. I found there was an eschar in the trachea no further down than two inches. There were absolutely none of those fumes that had touched the lungs proper.

Therefore, if this new compound can be inhaled and carried to the lung we have much to look forward to. Any young man who has an opportunity to study this should be encouraged. For the last fifteen or twenty years I have made it a point to countenance any attempt from the tuberculosis and cancer standpoint. Let us lend our past experiences towards the development of the science of medicine.

Dr. E. A. Bertucci (closing): I thank you gentlemen very much for the discussion of this paper.

Answering Dr. Durel's question whether it was the same product that was used in Covington in the sanatorium I was affiliated with, I will say that it is not. This preparation is entirely colorless and of a different formula entirely. The one used in Covington was a pine-tar preparation and extremely black. During my connection with that institution over there I didn't have time to investigate the nature of that particular treatment because of the fact that the institution was financially embarrassed and the patients did not have enough money to come to the institution and therefore it was dissolved.

I will say this with regard to the penetrating qualities of the dichlorobenzine, which Dr. Dempsey brought up, that the dichlorobenzine is very penetrating. I do believe the fumes penetrate and reach the alveoli cells. Dichlorobenzine itself is one of the most remarkable penetrating agents that we have today. It will penetrate wood. You can place it on a two-by-four piece of lumber and you will notice that the penetrative qualities of the dichlorobenzine are remarkable. I believe the vapors have the same effect, and that is the only agent I know of that will penetrate deep enough. It also has a fat solvent property which I am in hopes might have some action on the fatty capsule of the tubercle bacillus itself, although up to this time I haven't been able to make any definite observations because it is a little too early.

I was expecting the question: What is the cause of the hemostatic effect? I will tell you what I think the hemostatic effect is due to, from the experiments I have conducted on the ear veins of rabbits and noting the time it took to check the hemorrhage. I believe there is no direct chemical action upon the blood itself, but that the action is due to a physical one, namely, that it activates thrombin. When the cells are liberated in process of a hemorrhage there is a certain amount of dissolution which takes place, and we will not have any coagulation nor any formation of fibrin until the fibrinogen in the blood is activated by thrombogen for the production of thrombin, and lastly for the formation of calcium fibrin. I believe it is due to the dissolution of the blood cells themselves, and this particular agent activates thrombin in order that it may form the insoluble fibrin.

ROENTGEN-RAY EXAMINATION OF THE STOMACH.*

R. C. FINLAY, M. D.,
GREENVILLE, MISS.

A great many ailments in and out of the abdomen express themselves in derangements of the stomach. It is barely possible we were thus constructed so as not to eat if sick. This, of course, is conjecture and not offered as fact, and perhaps a poor guess, for we all more or less eat when we know we should not. Howbeit, many ailments not of the stomach upset it, and their effects are not unlike maladies of the organ itself. So, as a result, a most frequent question in diagnosis is what is the condition of the stomach.

Thirty-one years ago it was Roentgen's great privilege to discover the light that bears his name. The time is not too long to take all of novelty from it. I do not know whether it is the novelty of it or a compliment to its precision that the accuracy of its findings are so often expressed in percentages.

I once asked Professor Hickey of Michigan how accurate he thought a roentgen-ray diagnosis of the stomach should be. With characteristic sagacity he replied it depended on the build of the patient. A recent article by Bowman on examination of the stomach under pressure technic starts by saying "the greatest obstacle to accurate diagnosis of intra-abdominal organs is the abdominal wall."

Changes in the location of the stomach may be due to herniation of the organ or pressure of other viscera such as the spleen, liver and colon. Tumors of the liver, pancreas, colon, kidney or mesentery, particularly, or any of the neighbor structures may be a cause of changed form or location. Inflammatory masses or adhesions may deform it.

Benign tumors of the stomach wall itself are frequently mistaken for malignancy, but being rare, the error is pardonable. Polypi-fibromata, hemangiomata, and bezoars are the most frequent. Deformity of the stomach wall itself is often caused by spasm of its muscle fibers due to causes within itself or referred from other viscera. A spasm either of the stomach proper or the duodenal cap should first be proven not due to ulcer before a cause is ascribed for it.

Cancer of the stomach is the gravest lesion of the organ and the one in which early diagnosis is the most important, but unfortunately, hard to detect at a time when its detection would be most useful. Haudek gave four causes for the failure to detect cancer: (1) Its latent period; (2), delayed roentgen examination; (3) faulty roentgen examination; and (4) incompleteness of our modern roentgen technic. Only the last warrants comment. It seems as if the matter needs an entirely new approach, not unlike the state of diagnosis of duodenal ulcer was before the direct delineation of the lesion was attempted. Substitution of direct delineation for indirect signs brought great improvement in accuracy.

Before the tumor is visible to the roentgen-ray, inflexibility of the stomach wall is the earliest sign of carcinoma. Inspection under palpation would seem to be sufficient to discern this, but it is difficult. Hence the revival of the old polygram and multiple tracings. The polygram, let me recall, is the taking of several exposures on top of each other. The fixed part of the wall will be the only part not blurred. Less crude is the taking of several separate films, tracing them and overlaying the tracings. Tracings of fixed sections will then coincide giving a sharp line. The motile parts will not. After the tumor is delineable the disease has advanced to where few cases are operable with success. Ulcer accompanied by inflammatory exudate and syphilis are the most frequent imitators of cancer.

Ulcer of the stomach itself is usually near the lesser curvature, more often on

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the posterior wall than the anterior, but generally merging into the lesser curvature border. There may or may not be a spasm or incisura at the zone of the ulcer. Peristalsis is reduced and emptying is delayed. The ulcer niche, if large, makes the suspicion of malignancy enter, especially if the base is rigid. Ulcer of the greater curvature is regarded by most authorities as always malignant. Ulcers of the posterior or anterior wall, unaccompanied by spasm, can best be delineated by small amounts of barium and under pressure. Changes in the course of the rugae, and the barium filled crater, with or without a rim, are to be sought for.

Duodenal ulcer requires the deformity or niche with or without accompanying spasm for diagnosis. The niche, one or more, may be on the border, when seen in silhouette; or may be only a fleck as barium is pressed out of the viscus. The spasm usually surrounds the zone of the ulcer but does not always do so, taking on a bizarre shape instead. Ulcer of the duodenal cap may be the only explanation for a spasm of the stomach proper. Ulcer of the duodenum may or may not occlude the outlet. Whether it does or not governs the emptying time.

Duodenitis is an entity of which much has been written lately. The duodenum shows an irritability, is difficulty to keep filled with barium, is usually contracted but does not show an ulcer niche. Kirklin of the Mayo clinic has a report on forty-five cases proven by operation, in which the duodenum was opened, and no ulcer seen. The clinical behavior of the organ imitates ulcer even to visible or occult blood on occasion.

Gastro-jejunal ulcer occurring after a gastro-enterostomy is difficult of delineation, but possible by the use of small amounts of barium. Seeking the fleck or diverticulum as the small trickle goes through, and pressure is being made is the essence of the method. Also there should be deformity of stomach, stoma or jejunum. Possibly there may be gastro-jejuno-colic fistula or closure of the stoma. The niche is usually in the efferent loop in the first six inches.

This account scans the most important points in a very large field. Examination of a viscus subject to so many changes so important to the patient needs painstaking care, thought, and often repetition for results to be depended upon.

DISCUSSION.

Dr. C. C. Hightower (Hattiesburg): The essayist has covered his subject so well that little remains to be said. I would like to say a few words concerning the technic of roentgen-ray examination of the stomach. I have found by experience that I depend almost entirely on the fluoroscope instead of the skiagraph. A few years ago I was in the fluoroscopic room of one of the country's foremost clinics, and noticed the doctor in charge diagnosing cases after the fluoroscopic examination but before the skiagraph was made. I asked him why he made the diagnosis before the skiagraph was made, and he informed me that they depended on the fluoroscope for the diagnosis and made the skiagraph only for record. This was encouraging to me for it corresponded with my experience.

Like all other laboratory and technical procedures, the roentgen-ray examination of the stomach will prove more correct if considered in connection with the history, symptoms, acid content of the stomach, etc., in other words, making a diagnosis of a stomach lesion by exclusion as well as by direct examination.

Dr. B. H. Nichols (Cleveland, Ohio): In regard to the diagnosis of gastrojejunal ulcer we feel it is quite essential to always follow this examination by a retention plate in four or six hours which will sometimes show the ulcer crater still filled. In regard to gall-bladder examinations, we have discharged the follow-up on gall-bladders for emptying time, feeling that any gall-bladder that has concentrated enough iodine from the dye given orally on the previous evening to show a gall-bladder shadow in the morning must have filled and emptied many times during the night to produce this shadow. We then make the gastro-intestinal examination in the morning while the gall-bladder is still filled to determine its relation to the duodenum, and in this way adhesions and deformities may be definitely ruled. I am not in accord with the doctor's method of reporting only the findings on his roentgen-ray films and allowing the internist or surgeon to undertake the evaluation of such findings. I feel that the radiologist should arrive at a definite conclusion as to what his findings mean in relation to the case. Also reporting an ulcer with the statement that it

may not be an ulcer seems to me to be of little help to the surgeon or internist, who usually refers the case to the roentgen-ray department for the purpose of determining whether the patient has or has not an ulcer, so that he may account for the symptoms of which the patient complains. Although it is difficult for the radiologist to make a definite diagnosis I feel that he should attempt to do this, and if he is undecided he should make a statement to that effect in his report.

Dr. R. C. Finlay (closing): I take it from Doctor Nichols' statement of his scheme of stomach examination that he disregards the third picture of the gall bladder, and I would like to hear him say more about it.

GRANNY MAGIC.*

J. A. CRAWFORD, M. D.,

LAKE CHARLES, LA.

The apology for writing this paper is based on the fact that there is widespread superstition and ignorance existing, not only among the laity, but to some extent permeating the activities of the profession at large. If these practices were limited to tales of folk-lore, they could be condoned as simple amusement, and laughed at, but the pity of the condition is; that rank superstition is exercised in the prevention and treatment of many serious symptoms and diseases.

While different strata of lay people are guilty in the practice of every possible variety of "Granny Magic," the profession is also guilty in the prepetuation of certain empirical practices, handed down from the hoary ages when medicine was half science and half magic, and when symptoms were treated instead of causes of disease.

It is significant that the helpless infant has been made the goat, due, no doubt, to the fact that he is a victim unable to do more than make a more or less mild protest, but in the end, submit to those in whose hands lie his destiny. So that the bulk of this magic is thrust, as it were, on his tribe.

This magic, it must be understood, is not altogether limited to the ignorant classes, but is also widely practiced among the otherwise educated and intelligent people, for example: Unscrupulous leaders of a certain religious donomination in a Southwest Louisiana town are guilty of selling "Healing Prayers" printed on the cheapest paper obtainable, the printing conforming to the shape of a cross, and promising immunity from all ills,—toe-itch to bubonic plague, wealth and wisdom, if the "Prayer" is worn next to the chest day and night. These are sold at various prices to suit the individual buyer, some as cheap as twenty cents, and more elaborate ones, a dollar. This outrage was no doubt intended originally for the ignorant negro, but it also caught the ignorant white.

It is a common sight to all of us who practice in the more or less rural districts, to see: mole's front feet, boar's teeth, wild swamp root, garlic, onions etc. *ad infinitum*, strung around the baby's neck to facilitate teething or to prevent sore throat. And again: for "Thresh", "Get a child who has never seen its father to blow into the baby's mouth nine mornings in succession before sunrise and it will be cured".

It is considered criminal to cut a baby's finger nails, as it will become a thief when it grows up. Finger nails must not be cut on Fridays as this will cause toothache, but if one does have toothache, tobacco will cure it.

The wearing of a bag of asafetida around the baby's neck will prevent diphtheria (skunks are also immune).

"Sore eyes will be cured by applying mothers milk; a bag of dead ants, or dead wood ticks tied around the baby's neck will also cure sore eyes." Another remedy for sore eyes is to wipe the eyes with the wet diaper several times daily.

"Saffron tea will bring out measles and chicken pox."

For "Collick" the baby is given a concoction of senna and rhubarb.

Earache is treated by the application of a bit of kinky wool from a negro's head into the external canal of the offending ear.

*Read before the Louisiana State Medical Society, New Orleans, April 14-16, 1931.

"A string of amber beads will prevent croup."

"Sties will disappear if rubbed with a wedding ring, or if touched with the tail of a very black cat."

Goose grease and molasses are given internally for colds, and lard mixed with turpentine should be rubbed on the chest.

When spring approaches the regulation sulphur and molasses will purify the blood.

If a child has fits a puppy is given it to play and sleep with, when the dog dies the child is considered cured.

Chicken-pox is treated by bathing the child with water in which a chicken has been scalded.

"A baby will certainly have the seven-months colic if a menstruating woman picks it up."

Soot from the stove or fire-place is a standard dressing for the cord stump. Soot from hard wood fire is considered more efficacious than any other.

For colic: flagroot, catnip, coltsfoot, powdered egg shell, dirt daubers nest, snake root, ladyslipper, nutmeg and chicken gizzard, also milk through which tobacco smoke has been blown, are all excellent remedies.

For persistent crying: the first time the mother leaves the house after the baby is born, a thibmle is taken to *a well*, filled with water and carried back to the house without spilling a drop and given the baby to drink.

For bed-wetting: the feeding of a fried rat to the child is a specific, though some use a rat pie instead.

So much for lay magic, though one may go on enumerating without exausting the supply. Now lets turn the spot light on the "Learned Profession." About the first indignity perpetrated against the innocents is the belly-band. This instrument of torture has all of the ear-marks of a relic from the Spanish Inquisition. It is supposed to: protect the admonial wall, protect the spine, protect the cord-stump, to hold the cord dressing in place, to prevent umbilical hernia, to keep the body warm etc., the fact is that it never does any of these things. Frequently it is put on so tight that it prohibits the infantile breathing, forcing the thoracic type of breathing on the infant, thereby making irritable and otherwise uncomfortable a happy baby. This aparatus is never comfortable or useful, it is either: too tight, too loose, too high, too low or else too wet, and in my opinion it has no place in the new-born wardrobe.

A majority of us initiate treatment of all cases coming under our care with calomel or castor oil or both, expecting a miracle to happen, and it does frequently in spite of the punishment.

It may interest some of you to know that fully fifty per cent of breast-fed babies with gastro-intestinal upsets have had nursing mothers who give "poison milk," the doctor told the mother so and advised EB. or DB. instead.

Probably the ranking superstition on the food list is the faith vested in rice water and barley water. Infants are condemned and sentenced for from one to three weeks on a bread and water diet, minus the bread, and expected to recover.

At the risk of being slaughtered by a barage of gun-fire coming from popguns and big berthas, I am going to mention sweetened condensed milk as a superstition when used as a permanent infant food.

There is a clan whose bylaw is dogma, and they advise the mother to give their babies milk only for the first twelve months. All other food is dangerous and must not be trusted. The white, pasty, flabby and rachitic specimen is a fitting advertisement for the dogmatic one, but a source of much concern to the anxious mother.

"Working off a cold" with castor oil, is straffing the gut to cure the nose. This is indeed the extreme exercise of faith but a great indignity to the suffering baby who might have an acute tonsilitis, diphtheria, abscessed ears or a bronchitis.

"He'll out grow it", is a very much abused phrase. We out grow nothing except possibly a bib or hippins. The promise that the child will out grow a chronic upper respiratory infection, is rash to say the least.

And now "Green oil for the ears". The drop of blood which the layman coaxes from the "Bessie Bug" is equally efficacious, and a great deal easier to wash out when actual treatment is instituted.

The poor nursing mother comes in for her bit of this tomfoolery, and is admonished to "Eat no vegetables, no meat, very little fruit, but stuff yourself with gallons of milk, tea and cocoa." Then if the baby does not get enough breast milk, it is immediately weaned from the breast and given EB. or DB., instead of getting a complementary feeding with each nursing.

The wide spread use of "Anti-progistine" by all of the different paths, for pleurisy, pneumonia, angina pectoris and osteomyelitis, is equivalent to throwing up ones hands in despair to grope in darkness. In the words of the inimitable Frank A. Jones: "Whenever I find it on a patient of mine I want to say DAMN."

Last but not least is "Stool Worship." Some of us are continually poking our smellers and peepers into stools, and dosing the healthful infant who is gaining weight and growing happily, with this and that, because its stools "Do not look right" or "Do not smell right." Many times we get into real trouble by treating stools instead of the baby. In a large eastern hospital a member of the staff had the nurses report elaborately on each stool passed by every infant. A great deal of information was elicited on the character of the stools. The numerous descriptions given the stools by the different nurses on duty, varied widely in all except one quality, ie., under the column headed "Odor," the answer was invaribly "Bad."

Let's get away from all this "Granny Magic", find out the facts and face them, and then appropriate what little truth we have learned.

Fees for Services.—There appears to be a surprising amount of standardization in the fees charged by different physicians throughout the country for their services. In Stockton, as well as in the communities outside, the standard charge for an office call is $2.50, that for a home call (day) $3, and the charge for a night call $5. The deviations from these standard charges are very few. Of 65 physicians reporting, only 3 charge more than the standard fee of $3 for a home call, and only 1 charges less than that amount. For night calls, only 3 out of 60 reporting charge more or less than $5.

A question of great interest to both the physicians and the public is the extent to which the former make adjustments in their fees to patients who for one reason or another cannot pay the established charges. It is to be regretted that only a very indefinite answer may be derived from the data obtained in the course of the survey. In the schedule submitted to physicians the questions were asked: "During the past three months, (a) how many patients did you treat free of charge, and (b) how many did you treat at a reduced fee?" An examination of the answers makes it evident that the replies are approximations which can be used merely as indicators rather than as definite measures. Of the 60 physicians who replied to (a), 5 apparently had no free patients during 1929, 21 considered that their free patients represented from 1 to 2 per cent of their practice, and the other 34 estimated that they gave free care to 3 to 40 per cent of their patients. Fifty-nine physicians answered question (b). The answers in terms of the percentage of the total patients treated ranged from 0 to 50.

It appears that some of the physicians who did not wish to give free care or to treat patients at reduced fees referred to free clinics such patients as applied for financial adjustments. However, the total number of patients so referred is apparently not very great.—Sinai, Nathan, D. P. H.: A survey of the medical facilities of San Joaquin County, California. Publications of the Committee on the Costs of Medical Care: No. 12, p. 41.

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THE APPROACHING A. M. A. MEETING.

The officers particularly, and all enthusiastic members of the local Louisiana parish and Mississippi County Medical Societies as well, have this year a peculiarly forcible argument to encourage those medical men in their localities who have not joined the local units, to become members of organized medicine. In New Orleans will be held early in May the greatest medical meeting held in the world, bar none. This annual convocation of the American Medical Association is replete with attractions, scientific and practical. It affords an unsurpassable opportunity to hear, to see and to learn. A man who attends the meeting as a member of this great association of doctors can not help but feeling pride in his membership as he sees all that has been prepared for his edification and as he visualizes what the A. M. A. is doing for medicine and the doctors. The man who attends the meeting and does not belong to the Association must feel mean and selfish to think that he is not doing his share.

These facts should be presented to the recalcitrant physicians of Mississippi and Louisiana; they should be strongly urged to join up with organized medicine as there can be demonstrated to them concrete evidence of the greatness of the national organization of medical men. If these self-evident truths are presented by the local secretaries to those without the fold by personal contact or by a series of letters the membership of the two great state associations should be greatly augmented this year.

VOMITING AND DIGITALIS.

Up until comparatively a few years ago it was thought that the emetic action of digitalis depended entirely upon local irritation of the gastric mucosa. It is upon this hypothesis that many well intended physicians in the past have attempted to give digitalis either into the skin or into the vein in order to obviate the nausea and vomiting that is so common if digitalis is pushed to a full therapeutic dose. Numerous experimental investigations, both in the laboratory and the clinic, have shown that the nausea and the vomiting are central in origin and that it makes no dfference in what way, form or manner the drug is administered just so it is given in doses sufficient to stimulate the vomiting reflex. The observation that nausea is one of the first symptoms of digitalis intoxication has led to the utilization of this symptom as a method of determining when the patient has received a

sufficient amount of the drug and has become digitalized. It has been noted, furthermore, that after an attack of nausea, and possibly vomiting, if the drug is not stopped, these gastric symptoms will cease in a certain number of cases. Herein lies danger if certain facts recently shown by some recent work from the Department of Pharmacology of the Cornell University Medical School are not considered.* The workers at this institution have shown that if digitalis administration is persisted in, even after nausea and vomiting have stopped, increased poisoning of the heart results so that there may develop ultimately a toxic rhythm without emesis, notably shown by bigeminy, premature beats, and block. It is highly possible that if the drug is not stopped in time as more and more of it accumulates within the body, the patient may die of digitalis intoxication. Such an event happens in the experimental animal, and may well happen under clinical circumstances.

The authors hold that the most probably explanation of the change in the response of the vomiting reflex depends upon repeated cumulated doses of digitalis, which persistently accelerate the cardiac poisoning but simultaneously directly depressing the vomiting reflex. They were unable to develop any direct evidence of the exact seat of the depression of the vomiting reflex nor any accurate explanation of the increase in the threshold to stimulation by digitalis. The clinical observations, as well as animal experiments, indicate that from time to time active carditis and the progressive myocardial failure of the last stages of heart disease render the patient most susceptible to toxic rhythms due to digitalis. Irrespective of the why and wherefore of this particular action of this extremely important heart drug, the important fact remains that those clinicians who are accustomed to wait for the development of nausea and vomiting should be cautious in their further administration of the drug, even if the patients announce that they no longer feel nauseated! The cumulative effect may increase despite the fact that apparently the nausea and vomiting have been adequately controlled by a slight reduction in the dosage of digitalis.

*Gold, Harry, Travell, Janet, and Kwit, Nathan: Depression of the Vomiting Reflex by the Digitalis Bodies. American Heart Journal, 7:165, 1931.

THE DRUGGIST.

A recent publication of the Committee on the Costs of Medical Care entitled "A Survey of the Medical Facilities of San Joaquin County, California," presents some very interesting statistics which cover the practice of medicine in this typical American County. It would be impossible to comment on the report in toto.

The chapter on Drug Stores demonstrates what is well appreciated: that the average drug store has become more or less a general merchandize establishment, in which store the dispensing of prescriptions has become a minor service and function. The statistics of the Drug Stores in Stockton show there were thirty-nine in the City. Twenty-eight of those average less than one thousand prescriptions in the course of a year and several of them do not average five prescriptions per pharmacists per week. If practice makes perfect, certain the pharmacists of that City are having very little opportunity to acquire skill. The bulk of the prescriptions are put up by one or two large stores.

The gross sales of the druggists in Stockton amount approximately to one million and a half dollars. About 40 per cent of this is from the sale of drugs and other medical supplies. There is a tremendous amount of waste and duplication in the running of the drug store. Some of these stores in Stockton carry as many as thirty-four brands of cod-liver oil, 148 brands of liver pills, and 65 varieties of tooth paste. The digitalis and barbituric acid preparations indicate well this wasteful tendency. The percentage of money invested in the standard forms of digitalis

preparations, the tincture and the powder, is 34 per cent, the other 66 per cent being proprietary preparations. Practically the same figures hold true for the barbituric acid compounds.

These facts illustrate the efficacy of the sales plea of the detail man to the physician.

A study of the prescriptions ordered in 1909, 1919, and 1929 was made. The current prescriptions were found to contain fewer ingredients than those of twenty years ago. On the other hand, they contained a greater percentage of proprietory ingredients. The tendency to polypharmacy has decreased but the increase in the prescribing of proprietory preparations has been on the increase. In part the physician may be responsible in the increased cost of medical care, because the prescription which contains official ingredients only are considerably cheaper than those who contain proprietory ingredients. The average cost of a prescription is one dollar and five cents.

Although the physician is responsible for the prescribing of proprietory preparations the druggist does not feel responsible for the so-called counter prescribing. Often the physician verbally instructs the patient to get a bottle of a certain preparation. The patient subsequently orders the preparation for himself as he feels fit without the advice and guidance of the doctor. Frequently the same result is obtained by the physician giving a sample to his patient. Most of the counter prescribing, according to the druggist, consists of the selling of some proprietory for the relief of minor ailments.

The medical sales represent only 44 per cent of the gross sales in the drug stores while the prescription sales represent only 10 per cent, and only 21 per cent of the total gross medical sales in which items are included patent medicine, home remedies, and sick-room supplies.

HOSPITAL STAFF TRANSACTIONS

SURGICAL STAFF OF CHARITY HOSPITAL.

The Surgical Staff of Charity Hospital held its regular monthly meeting, January 20, at 8:00 p. m. in the Nurses' Auditorium. Eighty-eight members were present. The meeting was called to order by Dr. I. M. Gage, Chairman, and the minutes of the previous meeting read and approved.

Under unfinished business Dr. Gage reported his investigation of methods of preparing and storing drains and certain types of suture material. All such packages will carry dates in the future. He also called the attention of the Chiefs of Staff and Assistants to the ruling that they are responsible for the complete upkeep of records on their services. Dr. Gessner requested that in cases of discharge, desertion or death the records be held on the Ward until approved by proper authorities.

There were no new business, correspondence, or committee reports to be considered so the meeting passed to Scientific Session and the following cases were considered.

1. Colored male, 46, admitted December 6, died December 13. Endareritis-obliterans with gangrene. Arteriosclerotic gangrene.

2. Colored male, 43, admitted May 3, died December 26. Carcinoma of the stomach versus peptic ulcer. Operated upon May 12, Billroth No. 2 with anterior anastomosis. Readmitted October 21 with symptoms of obstruction. Died. Autopsy showed massive adhesions around gastro-jejunostomy. Case discussed by Drs. Walet, A. C. King, and Cassegrain. The operator was not present. Dr. King suggested that the secretary notify those members whose cases were to be discussed.

3. Colored male, 25, admitted December 14, died December 16. Peri or ischio rectal abscess. Not found on examination. Had signs of obstruction. Operation showed abscess in the abdominal wall near the inguinal canal. Examination of scrotum negative. Retroperitoneal peritonitis. Autopsy showed acute general peritonitis. Scrotum contained a large amount of pus. Case discussed by Dr. Emil Bloch and Dr. Connell from the Pathological Department.

4. Colored male, 55, admitted December 10, died December 6. Possible fracture of skull. Picture was suggested of extra dural hemorrhage.

5. White male, 42, admitted November 24, died December 6. Ruptured appendix with general peritonitis. When operated upon feces were found to be pouring into the peritoneal cavity. Discussed by Dr. Maes from the standpoint of cecostomy.

6. White male, 46, admitted November 26, died December 28. Ruptured appendix with general peritonitis. Operation showed ruptured appendix, wide spread peritonitis, feces spilled in peritonieal cavity on removing appendix which was retrocaeceal and bound by adhensions to the lateral abdominal wall. Rupture occurred at base which was found with difficulty due to many adhesions. Autopsy showed a fecal abscess walled off by the caecum and terminal ilium, encapsulated empyema on the right side, suppuration of the lower lobe of the right lung. The general abdominal cavity was free from infection and adhesions.

7. White male, 76, admitted October 12, and died December 20. Chronic osteomyelitis of the right second toe. Had incision and drainage then curratage with removal of bone, then amputation of the toe, and finally amputation of the leg using 200 milligrams of novocain for spinal analgesia. Case discussed by Dr. Lindner with a special reference to spinal analgesia.

8. Colored female, 15, admitted October 7, died December 1. Toxic myocarditis, central pneumonia, right unilateral fused kidney with left half pyonephrosis, left parotitis and toxic hepatitis. Operated upon as an emergency through a right rectus incision. A large mass was found occupying the mesentry of the small bowel to the right and anterior to the spinal column. Appendix negative. Sero-purulent fluid aspirated from the mass. Wound closed and turned on left side for right kidney incision. Mass opened from behind and a large amount of sero-purulent fluid evacuated. At a second operation on October 23 there was found in the lower left half of the fused kidney a large sac of pus which was dissected free and removed. Wound packed with gauze. Case discussed by Dr. Reed.

9. White female, 9, admitted November 12, died December 18. Broncho-pneumonia and empyema. Repeatedly aspirated and finally had open drainage. Case discussed by Dr. Danna from the standpoint of treatment by air replacement.

10. Colored male, 50, admitted November 3, died December 10. Acute exacerbation of chronic appendicitis. Case discussed by Drs. Cassegrain and Maes. Dr. Maes thought that the case might have been helped by ceceal drainage. Both Drs. Maes and Cassegrain discussed the use of spinal analgesia in such cases with reference to increased peristalsis. Dr. Loria discussed blood counts advocating that they invariably be done.

11. Colored female, 39, admitted December 2, died December 15. Chronic salphingitis. Operated upon December 8. Bi-lateral salpingo-oophorectomy, bilateral Norris suspension and appendectomy. Two days post-operative restless, dyspnoeic with cold clammy sweat, pulse 160, respiration 36, temperature 93. Improved slightly following infusion. On December 15, died. This case was of much interest and was discussed by Drs. C. Jeff Miller, von Holm of the Pathological Department, Dr. E. L. King and Dr. Butke regarding the pros and cons of hemorrhage as a cause of death. No autopsy was permitted.

12. Colored male, 36, admitted December 6, died December 6. Chronic nephritis, stricute of urethra, acute extravasation of urine, early pneumonia. Autopsy showed bilateral pyonephrosis. Case discussed by Drs. Wolff, Danna, and Reed.

13. White male, 30, admitted December 24, died December 30. Fracture of skull, linear right temperoparietal-region. Slowly progressive loss until death. Possibly hemorrhage. Case discussed by Drs. Loria and Anderson.

14. White male, 78, admitted November 4, died December 13. Chronic nephritis, regeneration of prostate following prostatesctomy, possible malignancy of stomach and pulmonary tuberculosis. Autopsy showed localized peritonitis with an erroded opening into the bladder covered by intestines and empyema on the left side.

There being no further business the meeting adjourned.

G. C. Anderson, M. D.
Sec'y. Surgical Section.

HOTEL DIEU.

The annual meeting of the Hotel Dieu Staff was held on Monday, December 21, 1931, Dr. Theodore J. Dimitry presiding.

The meeting opened with the presentation by Dr. Louis Levy of a case of ruptured appendix in a woman 85 years old, who had had no previous attacks. The appendectomy was performed under local and gas anesthesia (sodium amytal having been used pre-operatively), and free pus was found in the cavity. The patient is now doing fairly well.

Dr. Leo J. Schoeny offered a very instructive paper on "Peridontoclasia," a synopsis of which follows:

"The purpose of this paper is to arouse greater interest in this serious oral disease so that corrective measures may be instituted before general systemic involvement is brought about.

"Peridontclasia belongs to the class of oral foci of infection responsible for such conditions as arthritis, endocarditis, myocarditis, nephritis, gastritis, dyspepsia, ulcerations of the stomach and intestines, intestinal indigestion, auto-intoxication and constipation. Food taken into the mouth is mixed with infectious matter before swallowing; at times the virulent effects of these organisms are destroyed by oral and gastric secretions. But there is direct invasion of infection through blood and lymph channels.

"Most types of peridontal disease (also known as pyorrhea, peridontitis, paradentosis or peri-

dontoclasia) show numerous pus pockets of various forms. However, the type that does the most harm by invasion of infection through blood and lymph channels, causing secondary foci in distant organs, consists of a very deep pocket whose opening is constricted, preventing free drainage. This type is sometimes overlooked since it is unaccompanied by pain or irritation, and there is no looseness of teeth nor hypertrophy of the gingivae.

"Peridontoclasia is frequently the result of disorders developed during early childhood; for example, malocclusion. With the new Victor Bolin, Jr., dental film, satisfactory radiographs can be made of the teeth of small children, regardless of age, size or restlessness. The time of exposure is ¼ second. Fourteen to twenty films are necessary for a satisfactory and complete examination and diagnosis; this is sometimes supplemented by extra oral and occlusal views; by the vitality test of all teeth to note the presence of non-vital teeth; and by a transillumination of the jaws. The examination shows infectious areas already developed as well as conditions which may lead thereto, thereby making it possible to institute corrective measures and prevent the disorder.

"When we consider that 78 per cent of persons over thirty have suppurative destructions of maxillary bones resulting from peridontoclasia, we appreciate the importance of recognizing the condition in its incipiency before any serious systemic involvement.

"In spite of extensive research, no success has been met with in isolating a specific organism responsible for this disease; it is generally believed that the bacteria responsible are common inhabitants of the month, and non-specific. Accumulations of debris is on teeth favor infection of gingivae and peridental membrane, but are not the cause of peridontoclasia; it is often found unaccompanied by such deposits. Factors contributing are: Malposed, extruding and partly erupted teeth; empty spaces; tilting teeth; caries; drifted teeth with spaces between; and faulty crowns, fillings and bridges.

"It is now possible to completely eradicate the foci of infection without removal of teeth, providing there is sufficient bony support. Non-vital teeth, with suspicious peri-apical areas must be removed; also teeth of patients suffering with specific diseases as diabetes or syphilis. There are three types of treatment to eradicate pus pockets when retention of teeth is indicated: 1. Sub-gingival curettage (conservative treatment); 2, modified flap operation, and 3, gingivectomy. Surgery is never indicated with acute spirochete fusiform bacillus infection; the acute state must first be relieved. Some merit is claimed for ultra-violet and other physio-therapy measures.

"Successful treatment involves not only complete eradication of pus pockets, but correction of all predisposing and contributing factors. Providing all details are carefully carried out and the patient co-operates with proper mouth hygiene and post-operative treatments, the prognosis is favorable.

"This statement is based on eleven and a half years practice, and on results reported by nationally recognized leaders in this field."

Dr. H. Theodore Simon presented three cases of marked deformity in arthritis, the first two cases being demonstrated by the patients in person, and the third by motion pictures. In some cases, he said, these deformities can be prevented by the use of splints or traction, and he advised the surgeon and physician to endeavor to prevent them where possible.

The first case had a greater than right angle flexion of the left knee. The patient (at the time a little girl) was treated for pyoarthritis and she developed the deformity which continued for twenty years. The operation performed by Dr. Simon was an arthroplasty (rather than an arthrodesis). In the post-operative treatment, at one time there was a ninety-degree flexion; however, in giving physiotherapy, a burn developed and treatment had to be discontinued for a time. At present the patient has lost some of the ability to flex the knee.

The second and third cases of deformities developing from arthritis were taken from the Home for Incurables. These patients are not usually good surgical risks and the operations must be performed quickly to avoid the danger of shock. In the second case, arthrodesis was done on both knees and a Ghant osteotomy was done on both femurs. This patient, once bed-ridden, can now walk. The motion pictures demonstrating the third case showed the boy walking on his knees with the use of short crutches, his knees being ankylosed at right angles. After the operations, which were arthrodesis of the knees, he walked upright, using a cane only.

Dr. Simon stated he does not believe any case is absolutely helpless until something has been tried.

Dr. J. A. Danna described the operation of arthroplasty as done by Dr. Putti in Bologna, Italy. The operation, which requires only twenty minutes, is done only when there is firm, bony union between the two surfaces that previously moved freely. The upper two ends of the bone are cut by chisel and mallet until the surface resembles as nearly as possible the normal line of the joint; separation of at least one inch is obtained; fascia lata is interposed between the membranes so that the ends of the bone cannot unite; and passive motion is begun early.

Dr. Simon, in answer to queries from Dr. J. B. Guthrie and Dr. Maurice Couret, closed the discussion by explaining the details of the chisels designed by Putti and by Will Campbell to carve out the contours of the joint—Putti's to exactly resemble the anatomical condyle, Campbell's form-

ing a condyle without the mid-ridge. Dr. Simon recommended arthrodesis for cases of atrophic arthritis, since arthroplasty is a longer procedure. He called attention to the necessity for constant vigilance after the operation, as the flexion may cause stretching of the nerves and also interfere with circulation, sometimes necessitating the cutting of a case.

FRENCH HOSPITAL.

A regular meeting of the French Hospital Staff was called to order Friday, December 18, 1931, Dr. M. J. Lyons presiding. The minutes of the last meeting were read and approved.

The reports of deaths and discharges were read by the secretary. There were nine deaths during the month of November. Among the interesting cases were those of laryngeal diphtheria, acute enteritis and colitis, and acute cholecystitis with chronic pyonephritis. These deaths were discussed by Drs. Alsobrook, Harris, M. J. Lyons and Socola.

A motion was passed to change the date of staff meetings from the last Friday to the second Thursday of each month.

The officers for the following year were then elected. These include Dr. H. B. Alsobrook, chairman; Dr. S. C. Lyons, vice-chairman, and Dr. C. J. Brown, secretary. Dr. M. J. Lyons then thanked members of the staff for their co-operation and interest during his term as chairman of the staff. There being no further business the meeting adjourned.

Cuthbert J. Brown, M. D., per G. F.

VICKSBURG SANITARIUM AND CRAWFORD STREET HOSPITAL.

Staff Meeting, January 11, 1932.

Abstract: Subdeltoid Bursitis.—Dr. A. Street.

Patient.—White, female, aged 25, single.

Present Complaint.—Pain in right shoulder for past two days; impossible to raise arm on account of pain; some fever, anorexia and nausea.

History.—She fell on the right arm three months ago but did not strike shoulder. Recovery from this injury seemed to be complete. Tonsils had been removed. History otherwise not remarkable.

Physical Examination.—Not remarkable except for swelling of right deltoid region, painful motion of shoulder and tenderness of shoulder. Temperature 100° F.

Blood and urine examinations showed nothing abnormal.

Roentgenogram of shoulder showed calcification in the right subdeltoid bursa.

Treatment.—At first consisted of giving salicylates and intravenous mercurochrome. There was no improvement. The patient was then admitted to hospital and given 40 minutes of diathermy through the shoulder daily for three days. After the third day symptoms had entirely disappeared.

Abstract: Fracture of the Patella.—Dr. J. A. K. Birchett, Jr.

Patient.—Colored, farmer, male, aged 25.

Chief Complaint.—Pain and swelling in knee with inability to walk.

History of Present Complaint.—While riding a mule the day before admission was run into by an automobile which caused him to be thrown from the mule, falling on his left leg. There was immediate acute pain and he was unable to get up and stand on leg.

Past History.—Not revalent.

Physical Examination.—Rather thin, poorly developed negro male, carried into examining room as he is unable to walk. General examination essentially negative. The left knee, of which he complains, is swollen, contains fluid, and there is evidence of destruction of the surfaces of the patella with upward displacement due to pull of rectus femoris muscle. There are multiple abrasions in the vicinity of the joint with evidence of infection of the skin.

Wassermann, Kline and Young, and Kahn tests were negative. Urine not remarkable.

Roentgenograms showed comminuted fracture of patella.

Procedure.—With the presence of a local skin infection it was thought advisable to clear this up and to let some of the local inflammatory reaction subside before opening the joint and securing the patella fragments by suture.

After six days of hot lead acetate dressings the local infection appeared to be controlled and the acute inflammatory secondary to the traumatic shock was decidedly better. Tetanus antitoxin, 1500 units was administered on day of admission. Under spinal anaesthesia a flap incision designed so as to give a wide exposure was made. There was an escape of hemorrhagic fluid and blood clots. The medial and lateral ligaments showed evidence of forceful rupture. Their ragged ends were easily identified. The patella was crushed and the fragments scattered over the face of the joint surface in pieces from the size of a shot to three large fragments. The smaller pieces were free but the larger ones were still attached to then tendon of the rectus femoris above and to the patella tendon inferiorly. These were approximated by use of soft iron wire which loaned itself admirably as the mattress suture material to hold the pieces together. The bone was first drilled and the wire pulled through the hole. A good fixation was accomplished. The lacerated ligaments were sutured with cat gut and the knee joint closed with two small drains at the upper angle of the wound on each side. A plaster cast was applied to inhibit motion and to prevent strain on any of the sutures.

In 24 hours a window was cut in the cast to observe the wound and to take care of drainage. The drainage was never purulent and only sanguinous joint fluid. After seven weeks the cast

was removed and the patient coaxed to get up on crutches and he was surprised to find that he could control the injured knee and bear more weight upon it than upon the normal one. The stiffness and pain in the normal knee was due to lack of use for so long a time. The patient was discharged on the fifty-ninth day after the accident with a good result—control of the leg in extension and a painless joint.

Comment.—Causes of fracture of patella: (1) Direct injury as fall on a flexed knee; (2) muscular contraction by action of quadriceps femoris when knee is partly flexed.

The fracture may be longitudinal, oblique, or communicated. The commonest type is the transverse at the middle of the patella. This is due mostly to muscular contraction. The comminuted form is usually due to a direct blow. Periosteum and the fascial planes are likewise injured.

The diagnosis is made on the symptom of acute pain in the knee and inability to pick up and extend the leg or to lift it.

The signs are swelling, effusion into joint, crepitation of fragments and the palpation of fracture margins.

The Prognosis.—Those without displacement do not need surgery though the results obtained are not as good as those in which open reduction is done. In 30 cases reported in the literature, 24 treated openly showed good results in 86 per cent; 6 treated by the closed method showed good results in 66 per cent. The poor results were due to fibrous unions in the unopened cases.

Obviously, the best prognosis is obtained by open reduction and the sooner this is done the better the result. Eighty per cent of all fractures of the patella are treated by the open method. Closed reduction is accomplished by fixing the fragments after manipulating them into place, by adhesive strips and then placing the leg in extension with a heavily padded splint placed posteriorly to hold the leg in complete extension. In the open method only Kangaroo tendon is used by many surgeons as it is held by some that iron wire may result in a foreign body.

KING'S DAUGHTERS' HOSPITAL, GREENVILLE, MISS.

Staff Meeting, December 9, 1931.

Abstract: Primary Sarcoma of the Lung.

Mrs. E. L. A., a well-developed white woman, aged 56, housewife, entered the King's Daughters' Hospital, May 16, 1931. She complained of spells of coughing in which she would almost lose her breath, a marked loss of weight, a feeling of fatigue, night sweats and a hacking cough that had been present for six or eight months.

Her temperature on admission was 99.5° F. and varied from 98° F. to 102° F. during the forty-five days in hospital. Her blood showed 80 per cent hemoglobin, 4,590,000 R. B. C. and 22,000 W. B. C., with 86 per cent polynuclear neutrophiles. The blood Wassermann was negative; the urine was not noteworthy. The sputum was negative for acid—fast bacilli and blastomycetes. Blood urea nitrogen was 20 mg. per 100 c.c. Her white blood count gradually increased to 30,000 per cu. mm., with polynuclear cells varying from 86 per cent to 89 per cent.

Roentgen ray examination of her chest showed a large circumscribed shadow in the middle of the right chest extending from the mediastinum to the costal border and from the third to the right rib. A lateral view showed the shadow extending from the posterior to the anterior wall of the chest.

A probable diagnosis of lung abscess was made and a thorocotomy was done on May 19, 1931. Some small bits of tissue received by aspiration were examined but showed only necrotic tissue and cultures were negative. On June 25, a piece of tissue growing from the lung out into the thoroctomy wound was removed for examination. From this examination the diagnosis of fibro-sarcoma was made.

The patient was discharged from the hospital July 1, 1931, unimproved, and only July 10 she died.

Primary sarcoma of the lung is a rare malady. Adler was able to select only 90 cases from the literature and many of these did not present sufficient evidence to justify their classification as sarcoma. Ball in a review of the German, French and English literature since 1900, only finds 14 cases reported.

Pulmonary sarcoma may be of two types: a diffuse spindle cell or fibro-sarcoma and a round cell sarcoma. Fibro-sarcoma is seen more often in older people while a round-cell sarcoma is more common in young people. Fibro-sarcoma usually progresses slowly while round-cell sarcoma shows a rapid progress with an early fatal termination.

F. M. Acree.

GEORGE C. HIXON MEMORIAL HOSPITAL, ELECTRIC MILLS, MISSISSIPPI.

Staff Meeting December 7, 1931.

The Regular monthly meeting of the Geo. C. Hixon Memorial Hospital staff of Electric Mills, Miss., was called to order by Dr. A. M. McCarthy, Surgeon-in-charge. The secretary's hospital report for month of November was read and accepted. Previous to the regular meeting Dr. McCarthy gave a brief synopsis of his visit to the meeting of the Southern Medical Association in New Orleans.

The scientific program for the evening was a case report given by Dr. J. L. Hasie: Bronchial Spirochetosis.

Patient.—A negro male, unmarried, section laborer, aged 25 years, admitted to the hospital December 19, 1931, 3:00 P. M.

Chief Complaint.—Pain in right side of chest, productive cough, loss of weight, night sweats, and fever of six weeks duration.

History.—On October 29, 1931, while patient was at work he was seized with a severe chill followed by high fever and pain in chest which was intensified by deep breathing. He went to bed and remained there until November 1, when he attempted to return to work, but was unable to do so. At this time he noticed that pain had localized in his left chest and that he had developed a severe cough, productive in nature with blood-tinged sputum. The pain in the chest radiated to the lumbar region and patient stated that his back hurt worse when he coughed. Fever at this time was noted as rising in the afternoon and going down at midnight. These symptoms continued until admission to hospital, and were accompanied by loss of ten pounds and night sweats.

Physical Examination.—A well developed and nourished negro male, aged 25 years, lying quietly in bed, apparently acutely ill. Temperature 103° F.; pulse 110; respiration 34. Blood pressure 140/80. Skin hot and moist, eyes reacted sluggishly to light and accommodation, examination of nose, ears, accessory sinuses, mouth, and throat revealed nothing abnormal. Chest contour normal with exception of a slight tendency toward a barrel chest. There was moderate limitation of expansion of entire left chest, but no lagging. Percussion revealed many small scattered areas of consolidation over both lobes of left lung. Vocal and tactile fremitus were greater on the left than on the right. Auscultation revealed many scattered areas of tibular breathing and many coarse and fine rales over entire left chest. A few scattered coarse and fine rales were noted over right chest, but no evidence of consolidation could be found. Heart: sounds were normal. Abdomen: Revealed nothing unusual Back: There was tenderness to pressure over the second and third lumbar spines. Extremities: Appeared normal. November 6—Areas of consolidation seemed to be less easily made out, and tubular breathing was diminished. Temperature 101° F.; pulse 100; respiration 28. November 11: Cough still productive in nature, pain still marked in left chest, a few fine rales noted over left lung, Temperature, pulse and respiration are normal. This condition remained unchanged until after admission to the hospital on December 19, 1931.

Laboratory Findings on Admission.—Leukocytes 8,000; neutrophiles 64 per cent, small lymphocytes 23 per cent. Urinalysis negative. Wassermann reaction strongly positive. Sputum examination revealed many spirochetes which were identified as Spirochaetae bronchialis; negative for tubercle bacilli.

Clinical Course.—The most marked symptoms were a severe hacking cough, almost paroxysmal in character, with profuse blood tinged sputum, and pain in lumbar region. Physical examination revealed nothing except a few fine musical rales about apex on deep inspiration. A roentgenogram was taken which showed diffuse mottling of both lungs, most marked on the left side about the hilum and bronchial tree. With these findings prior to the laboratory examination, a preliminary diagnosis of diffuse tuberculosis of the fibrous type was made. With the findings of spirochetes in the sputum on repeated examination, plus the absence of tubercle bacilli, a diagnosis of pulmonary spirochetosis was made. The positive Wassermann made us suspicious of syphilis of the lung, but the continual presence of spirochetes, and the absence of physical findings ruled this out.

Treatment.—Neoarsphenamine, 0.3 gm., was given intravenously, and the improvement was immediate. The dosage was increased to 0.6 gm. given at 5-day intervals, and two injections given prior to the discharge of the patient apparently cured, on December 30, 1931. Treatment will be continued. At the time of discharge the sputum was free of spirochetes.

Discussion by Dr. J. L. Hasie.—To me this case is of especial interest because of the rarity of the condition, the acute onset which we diagnosed as broncho-pneumonia, followed by the almost typical and roentgen ray finding of tuberculosis. The differential diagnosis was not difficult after the repeated finding of spirochetes bronchialis in the sputum.

Syphilis and tuberculosis have already been ably discussed by Drs. McCarthy and Baldree.

The possibility of the spirochetes coming from the gums or teeth was eliminated by carefully washing the mouth before obtaining each specimen.

This condition was first described by Castellani in 1905, and he describes it as follows: It is most common in the tropics, and is classified as acute, subacute, and chronic. In the acute form it resembles acute bronchitis with an acute onset, characterized by high fever, pain in the chest, severe cough with scanty blood-tinged sputum, and many organisms in the sputum. If the parenchyma of the lung is involved there may be areas of dullness and all kinds of rales. The subacute form resembles the chronic. The chronic form usually follows an acute attack or may come on gradually. There may be fever, sputum is somewhat scanty, and blood tinged, hemoptysis may occur, there may be areas of consolidation, and all kinds of rales as in the acute type. Spirochetes in large numbers are found in the sputum. The mouth should be cleansed thoroughly to avoid the presence of mouth spirochetes. The prognosis is usually good, but the course may be very chronic. The condition may be regarded as tuberculosis, but careful study of the sputum should correct the error.

Neoarsphenamine or Fowler's solution is the standard treatment. The most remarkable thing about this case is the prompt response to treatment, with immediate cessation of all symptoms.

TRANSACTIONS OF ORLEANS PARISH MEDICAL SOCIETY

CALENDAR.

February 1—Eye, Ear, Nose and Throat Hospital Staff, 8 P. M.
February 5—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.
February 5—Physiology Seminar, Tulane Medical School, 5 P. M.
February 10—Touro Infirmary Staff, 8 P. M.
February 11—French Hospital Staff, 8 P. M.
February 12—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.
February 12—Physiology Seminar, Tulane Medical School, 5 P. M.
February 12—New Orleans Gynecological and Obsterical Society, 8 P. M., Touro Infirmary.
February 15—Hotel Dieu Staff, 8 P. M.
February 16—Charity Hospital, Medical Section, 8 P. M.
February 17—Charity Hospital, Surgical Section, 8 P. M.
February 18—Eye, Ear, Nose and Throat Club, 8 P. M.
February 19—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.
February 19—I. C. R. R. Hospital Staff, 12 Noon.
February 19—Physiology Seminar, Tulane Medical School, 5 P. M.
February 19—Mercy Hospital Staff, 8 P. M.
February 22—ORLEANS PARISH MEDICAL SOCIETY, 8 P. M.
February 23—Baptist Hospital Staff, 8 P. M.
February 26—Pathological Conference, Hotel Dieu, 11 A. M. to 12 Noon.
February 26—Physiology Seminar, Tulane Medical School, 5 P. M.

During the month of January besides the regular meeting of the Board of Directors, the Society held its annual Installation Meeting and one regular scientific meeting.

At the Installation meeting the retiring President, Dr. Emmett Irwin, presented his report. The Inaugural Address of the President, Dr. John A. Lanford, was then read. Rabbi Louis Binstock, the Annual Orator, gave a most interesting address on, "What is it to be Educated?"

The following officers were installed:

President—Dr. John A. Lanford.
First Vice-President—Dr. Edward L. King.
Second Vice-President—Dr. Waldemar R. Metz.
Third Vice-President—Dr. Daniel N. Silverman.
Secretary—Dr. H. Theodore Simon.
Treasurer—Dr. Frederick L. Fenno.
Librarian—Dr. Alton Ochsner.

Additional Members—Board of Directors.

Dr. H. B. Alsobrook, Dr. Emmett Irwin, Dr. Walter E. Levy.

Following the meeting there was dancing and refreshments were served. The arrangements for this meeting were in charge of the Woman's Auxiliary. There was a very good attendance.

At the meeting held January 25 the annual reports of the Officers and various special and standing committees were read.

Two scientific papers were read and discussed as follows:

Sedimentation rate of Erythrocytes. Brief History and Discussion of Theories. Application in Gynecology.

By: Dr. Adolph Jacobs. Discussed by Dr. Leopold Mitchell.

Goiter: A Brief History of its Surgery and a Review of One Hundred and Twenty-eight Operated Cases in a Non-goiter District.

By: Dr. Howard R. Mahorner. Discussed by Dr. Alton Ochsner.

The following applications for membership are posted:

Active Membership: Drs. W. T. Browne and W. R. Hardy.

Interne Membership: Drs. N. J. Bender and L. S. Charbonnet, Jr.

TREASURER'S REPORT.

Actual Book Balance Nov. 30, 1931	$ 342.78
December receipts	1,854.66
Insurance received	2,266.57
	$4,464.01
Expenditures	886.64

ACTUAL BOOK BALANCE:
December 31, 1931 ..... $3,577.37

LIBRARIAN'S REPORT.

Twenty-six books have been added to the Library during December. Of these 14 were received from the New Orleans Medical and Surgical Journal and 12 by gift. A notation of new titles of recent date is given below.

The Library has had constant visitors during the month, first from the Association of Deans of Medical Colleges, and more recently the members of the American Association for the Advancement of Science.

New Books.

Bell—Some Aspects of the Cancer Problem. 1930.

Scheffel—Medical Jurisprudence. 1931.

Hertzler—Surgical Pathology of Diseases of Bone. 1931.

Stevens—Textbook of Medicine for Nurses. 1931.

Stevens—Practice of Medicine. 1931.

White—Medical Psycology. 1931.

Fuller—Synopsis of the U. S. Pharmacopoeia. 1931.

White House Conference—Health Protection for the Pre-School Child. 1931.

Reed—Health for Travelers. 1931.

LeRoy—Paralyse generale et malariatherapie. 1931.

Piney—Recent Advances in Hematology. 1931.

Beardwood—Simplified Diabetic Management. 1931.

Andrews—How's Your Blood Pressure. 1931.

Dobson—Dynamic Retinoscopy. 1931.

New York—Hospital Department. Report. 1930.

Dinwiddie—Child Health and the Community. 1931.

American Association of Medical Milk Commissioners. Proceedings. 1931.

H. Theodore Simon, M. D.
Secretary.

Medical and Surgical Problems Associated with Coronary Sclerosis.—The pain observed following acute occlusion of a coronary vessel certainly appears to have a definite pathologic basis. The major difference between this pain and that which is unassociated with coronary occlusion is probably one of degree only. Atheroma of the coronary arteries is the common lesion found in cases of coronary sclerosis, and the pain is considered to be the result of anoxemia due to a blood supply "suddenly insufficient for the needs of the heart muscle for the moment." In certain cases of angina pectoris, sufficient changes in the coronary vessels to account for inadequate blood supply are lacking, and a paroxysmal vasomotor spasm has been postulated to explain these cases. The demonstration by Anrep and Segall that there is vasomotor control of the coronary circulation in the dog might be regarded as supporting the conception of such a mechasism of production of pain. However, the explanation of anginal pain on the basis of paroxysmal vasomotor spasm is at present devoid of any reliable clinical or experimental proof.

Angina pectoris is sometimes observed in cases of pernicious anemia, hyperthyroidism, and paroxysmal tachycardia. There are evidences that in many of these cases the coronary vessels are not the seat of notable disease. It seems highly probable that the factor productive of pain, common to all these mechasisms, is a coronary circulation that is inadequate in the amount of oxygen furnished to the cardiac muscle. It is important to note that angina pectoris arising from any of these conditions is usually overcome by correction of the underlying disturbance. Consequently, the prognosis of angina pectoris, when it arises from these causes, is much better than when the condition has its origin in coronary sclerosis. . . . .

The most important step in distinguishing acute conditions in the abdomen from acute coronary obstruction, is the careful taking of the anamnesis. This is particularly true if patients have cholelithiasis or peptic ulcer; in such cases a painstaking review of the history usually will suffice to establish the presence of these conditions. If one remembers that cardiac arrhythmia, muffled apical heart tone, gallop rhythm, friction rub and particularly a rapid drop in blood pressure are symptoms of cardiac insult, the differential diagnosis usually can be made. Willius and Fitzpatrick found that the gall bladder was diseased in twenty-four per cent of cases of coronary sclerosis. When disease of the gallbladder or peptic ulcer exists with acute coronary obstruction, it may be difficult or impossible to arrive at a differential diagnosis. . . . .

In distinguishing acute coronary obstruction, from acute pancreatitis and intestinal obstruction, the electrocardiogram may be of diagnostic value if twenty-four or more hours have elapsed after the onset of the attack. The fecal vomiting, "ladder pattern" seen on inspection of the abdomen, and abdominal rigidity will establish the diagnosis of intestinal obstruction as a rule. As between acute pancreatitis and coronary disease the diagnosis must rest on the occurrence of local tenderness and rigidity in pancreatitis, the history relative to coronary disease, the physical signs of cardiac injury, and possibly on the electrocardiographic changes.

Finally, the surgeon is interested in the problem of the surgical treatment of angina pectoris. Here a plea for conservatism must be made. First of all, operations undertaken on patients with angina pectoris are done at considerable risk. Second, if the surgeon is successful in alleviating pain there is no reliable evidence to indicate that he has modified the serious pathologic process that is the basis for the pain. It is even debatable how much one is justified in depriving the patient of the signal which will warn him that his heart is distress. At present we are inclined to reserve attempts at surgical relief of patients who fail to obtain reasonable help from the combined use of xanthine derivatives and adherence to a strict regimen. If this treatment fails, the surgical procedure of choice is the conservative method, consisting of paravertebral injection with alcohol of the upper five thoracic nerves.

REFERENCES:

Barnes, Arlie R.: Medical and surgical problems associated with coronary sclerosis. Ann. Int. Med., 5: 873-885, 1932.

LOUISIANA STATE MEDICAL SOCIETY NEWS

H. Theodore Simon, M. D., Associate Editor.

PRESIDENT'S PAGE

DO WE WANT IT?

In 1884, Bismark took a leap in the dark and brought to birth in Germany, a system, the evolution of which is Germany's present scheme of State or Socialistic Medicine, an intolerable scheme both to doctor and patient, as well as a deterrent to scientific medical development.

Bismark was a statesman, but unfortunately a political opportunist as well. Expediency was his God: towards mankind he felt no profound obligation. The people were and remained in his eyes purely a thing to be governed. His statesmanship, it is recorded, cautioned against his blind leap, but his political philosophy—"No one does anything for his neighbor unless he finds it to his own interest," urged.

Germany had become a great industrial state, and the growth of socialistic and radical doctrines among their rank, filled Bismark with concern. His political reasoning saw in their unrest and rancor, the acquisition of further power and public popularity by their appeasement, which at that stage of his career he found himself in sore need. Thus was born the first state guaranteed insurance against sickness, old age, accidents and every other affliction known to man.

While his plan for a Great Imperial Insurance Department, covering all the ills of the workman, failed, the seed fell in fertile soil and after nearly fifty years, it has evolved into the present medical status in Germany, a full blooded socialistic state medicine, for there can be no state medicine without socialism.

As we study the life history of Bismark, the author, father and founder of state medicine, and note the influences surrounding him, how striking is the similarity of his environment, politically, and his line of reasoning, to those among us today, entrusted with leadership and the direction of public opinion.

However, it can be said in his justification, when he took his great leap in the dark, it was truly in darkness, for he had no precedent to guide him, no unfortunate people ahead of him, or at his time, had played with the fire with which he was playing. Yet in this enlightened age and in this enlightened country of ours, with all the light of history at hand, we find leaping into the dark, men into whose hands we have placed the destiny of our country and her great institutions.

Upon the shoulders of some must rest the responsibility of stemming or directing the tide; upon the shoulders of all of us rests the responsibility of doing our part in establishing reason, sanity and patriotic programs.

The evils which now beset on all sides, the people of the whole world, as well as those of us in this Country, are admittedly due to the game of politics, directly or indirectly. It was not politics, but the game of politics, which Bismark was playing, when, in seeking to gain the good will of the working classes of Germany, he proposed his scheme of socialistic medicine.

It is certainly not the science of politics, but the game of politics which we find our Congress, Legislators, Parish and Municipal governing bodies playing, when they heedlessly provide with public funds, free medical service for people who are in no sense indigent.

Only pigmy minds can argue the justness of such schemes, or that they have any justification or place in any plan of government other than a purely socialistic one. No one believes that such policies would ever have the backing of our Congress, our Legislature, or our Municipal and Parish officials, unless there were political fences to be strengthened.

There are none among us who believe other than it is the Government's duty to provide for her indigent sick through our Congress, Legislature, Parish and Municipal authorities, and there are none among us who believe that in our form of government, it is conducive to good citizenship, or fair to our whole citizenship, to provide for those who are not indigent.

This question is simply brought forward as an illustration of the practices which the professional politician will follow in an effort to gain political prestige, regardless of the far reaching and baneful effects.

Bismark could only imagine: we cannot believe his imagination pictured the result. We today do not have to use our imagination, we can see with a clear vision, the end.

This tendency existing among our governing bodies from Washington to our City Hall, is the result purely of politics and the agitation of uplifters, reformers and sentimentalists. If allowed to go unopposed, unchallenged, the conditions existing in Germany and among other European countries, will necessarily follow.

The business of the practice of medicine is the business of the medical profession and it, and it only, knows how it should be run. The leadership in medical matters of whatever nature, must be assumed and taken over by the profession.

Every local Medical Society must have machinery by which the truth can be carried to the public in a convincing manner. Our State Society should and must have a public information

bureau, a department from which there should flow regularly and systematically, information which will direct and form public opinion in line with truth.

As a first step in this direction, I make an appeal to each component Society in the State to at once organize a committee whose function it will be, to mix into the "goings on" of your community, and direct diplomatically, those activities touching on medical interests. An occasional public meeting where fundamentals pertaining to organized medicine, may in a dignified way, be gotten to the public; regular contributions to your local papers on medical matters and other such activities would be in order and proper.

In Germany today, the doctor is paid by the government, twenty five cents for an office consultation, fifty cents for a house call, and is subject to investigation as to whether all of his calls were necessary. Other fees are in proportion. The wage earner is taxed a certain per cent of his wage which goes into a fund, and the army of government employees to dispense this fund is larger than the number of doctors to which it is dispensed.

The government controls the doctor and controls the patient. The patient cannot have a doctor without the consent of the government, and the doctor can have no patients unless he is an employee of the government.

This is their system. Do we want it?

S. C. Barrow, Pres.
Louisiana State Medical Society.

1932 PARISH OFFICERS.

The following Parish Medical Societies have elected officers for 1932:

Caddo Parish (Shreveport): President, Dr. B. C. Garrett; Secretary, Dr. Wm. B. Heidorn; Treasurer, Dr. J. E. Knighton, Jr.; all of Shreveport.

East Baton Rouge Parish: President, Dr. Rufus Jackson; Vice-President, Dr. T. C. Foreman; Secretary-Treasurer, Dr. W. H. Pipes; Delegates, Dr. R. G. McMahon, Dr. H. W. A. Lee, Dr. Rufus Jackson; all of Baton Rouge.

Morehouse Parish: President, Dr. E. L. Miller, Bonita; Vice-President, Dr. J. N. Jones, Bastrop; Secretary-Treasurer, Dr. L. E. Larche, Bastrop; Delegate, Dr. W. A. Rogers, Bastrop; Dr. R. B. Leavell, Bastrop.

Rapides Parish: President, Dr. L. D. Gremillion; First Vice-President, Dr. S. J. Phillips; Second Vice-President, Dr. E. R. Gandy, Alexandria; Secretary-Treasurer, Dr. D. B. Barber, Alexandria; Board of Censors, Dr. J. T. Cappel, Dr. R. B. Wallace, Dr. J. A. White; Delegates, Dr. E. DeNux, Dr. King Rand, Dr. D. C. McBride; Alternates, Dr. J. A. Packer, Dr. J. T. Cappel, Dr. H. A. White; all of Alexandria.

Vernon Parish: President, Dr. W. E. Reid; Vice-President, Dr. W. W. Talbot; Secretary-Treasurer, Dr. D. O. Willis; Delegate, Dr. D. O. Willis; Alternate, Dr. F. P. Jones; all of Leesville.

Washington Parish: President, Dr. H. V. Jones, Bogalusa; Vice-President, Dr. L. L. Lancaster, Bogalusa; Secretary-Treasurer, Dr. F. A. Williams, Franklinton; Delegate, Dr. H. V. Jones, Bogalusa.

HEALTH OF NEW ORLEANS.

The Division of Vital Statistics of the Department of Commerce has issued the following reports on the health of New Orleans. For the week ending December 19, there were 148 deaths, giving a death rate of 16.5. Ninety-one of these deaths were among the white population and 57 in the colored, a death rate for the former of 14.3 and for the latter 22.1. The infant mortality rate during this week was 73. For the following week ending December 26 there was a slight decrease in the number of deaths in the City. Ninety white persons and 47 colored individuals died during this week, giving a death rate of 15.3 for all deaths, 14.1 for the white and 18.2 for colored. The infant mortality rate was very low, being 45. The week ending January 2 was not quit as healthy in the city as 146 patients did, making a death rate of 16.3. The increase in deaths was practically entirely among the colored population, who had a rate of 28.3 as a result of 73 deaths, whereas the white death rate was only 11.4. During this week there were 12 deaths in children under one year of age, giving an infant mortality rate of 67. The report for the week ending January 9, 1932, shows a still further increase in the number of deaths in the City, there being 157, 93 of whom were white people, 64 colored, giving a death rate for the total of 17.3, for the white 14.4, and for the colored 24.4.

INFECTIOUS DISEASES IN LOUISIANA.

Dr. J. A. O'Hara of the State Board of Health, in collaboration with the United States Public Health Service, has issued for the past four weeks the following weekly morbidity reports, which are briefly abstracted below. For the week ending December 19, the most frequent diseases reported in Louisiana were as follows: sixty-nine cases of syphilis, 46 of tuberculosis, 44 of diphtheria, 40 of gonorrhea, 37 of pneumonia, 26 of scarlet fever, and 19 of typhiod fever. During this same week there was reported one case of smallpox and one of undulant fever. The typhoid fever rate showed a marked decrease over the previous week. Unfortunately, this decrease was temporary, as the week ending December 26, 39 cases of typhoid fever were re-

ported, exceeded only by the 42 cases of cancer among the reportable diseases. In addition to these two diseases, there were reported 35 cases of pneumonia, 33 of diphtheria, 20 of syphilis, and 25 of tuberculosis. One case of epidemic meningitis was reported. For the week ending January 2 the reportable diseases as a whole had markedly decreased. Thirty-four cases of diph- syphilis, 50 of whooping cough, 27 of gonorrhea, pneumonia, and 15 of syphilis. Measles was reported for the first time in numbers exceeding 10 for some period of time. Of the rarer diseases one case of poliomyelitis was reported, 4 of leprosy, 2 of smallpox, and one of undulant fever. The week ending January 9 saw the following diseases reported together with their number: forty-six of pulmonary tuberculosis, 35 of syphilis, 50 of whooping cough, 27 of gonorrhea, 25 of influenza (as contrasted with 138 cases the corresponding week of last year), 14 of scarlet fever, 17 of typhoid fever. Seven cases of smallpox were also reported, and one of leprosy.

NEWS ITEM.

Dr. Isidore Cohn, Professor of Clinical Surgery with the Graduate School of Medicine of The Tulane University of Louisiana, attended a meeting of the Fracture Committee of the American College of Surgeons held at Chicago, Ill., January 8-9, 1932.

THE AMERICAN COLLEGE OF PHYSICIANS.

The annual meeting of the American College of Physicians will be held in San Francisco, California, the week beginning April 4, 1932. A series of clinics and a group of papers will be presented at this meeting. It will be impossible to enumerate all of the distinguished authors who will present papers at this meeting. A few might be mentioned from the many: Doctors Thomas Addis, Walter C. Alvarez, J. M. Blackford, Arthur L. Bloomfield, B. J. Clawson, Arthur D. Dunn, George Dock, George B. Eusterman, Chauncey D. Leake, Hans Lisser, Jonathan C. Meakins, James H. Means, LeRoy S. Peters, Russell Wilder. Particularly interesting will be the symposium on the autonomic nervous system, in which the following speakers will take part: Doctors S. W. Ranson, Walter B. Cannon, Harry L. Alexander, Hilding Berglund, A. J. Carlson, Alfred W. Adson.

THE MID-SOUTH POST GRADUATE ASSEMBLY.

The Mid-South Post Graduate Assembly, which is the new title for the old Tri-States Medical Association of Mississippi, Arkansas, and Tennessee, will meet in Memphis, February 9-12, 1932. A large and comprehensive program has been arranged for this meting, and numerous speakers will be imported to give their expositions on subjects of which they are well qualified to speak. The lecturer include such men as Drs. Chevalier Jackson, Philadelphia; Martin Fischer, Cincinnati; John Erdman, New York; Charles Scudder, Boston; Irvin Abel, Louisville; Ralph Pemberton, Philadelphia; Paul White, Boston; J. C. Litzenberg, Minneapolis; H. R. M. Landis, Philadelphia; Wilburt Davison, Durham, N. C.; Kenneth Lynch, Charleston; Charles Elliott, Chicago; F. T. Lord, Boston, beside many other well known men. Dr. Morris Fishbein, Editor of the Journal of the American Medical Association will deliver the annual address at the banquet to be given during the course of the meeting. The annual address of the President, Dr. A. G. Payne, Greenville, Mississippi, will precede Dr. Fishbein's postprandial address.

The old Tri-States Medical Association had for several years a very large atendance. With the broadening of the scope of this organization and the widening of its membership field, there can not be very much doubt that the new organization will make an excellent record for itself, particularly as the energetic and dynamic Dr. A. S. Cooper of Memphis as Secretary-Treasurer remains as the guiding hand of the organization.

THIRD INTERNATIONAL CONGRESS OF SANITARY TECHNICS AND URBAN HYGIENE.

The Third International Congress of Sanitary Technics and Urban Hygiene will be held at Lyons, March 6-9, 1932. Various problems in transport hygiene, habitation hygiene, hospital constructions, atmospheric problems and so on will be discussed.

WOMAN'S AUXILIARY NOTES.

On account of lack of space, the names of the officers of the Woman's Auxiliary to the Louisiana State Medical Society have not hitherto been published, and we take this oppoortunity of redeeming this omission.

President—Mrs. H. W. E. Walther, New Orleans.

President-Elect—Mrs. R. T. Lucas, Shreveport.

Vice-Presidents—Mrs. Roy Harrison, New Orleans; Mrs. C. R. Gowen, Shreveport; Mrs. L. T. Baker, Shreveport, and Mrs. Claude Baker, Minden.

Recording Secretary—Mrs. T. E. Watkins, Lake Charles.

Corresponding Secretary—Mrs. F. M. Johns, New Orleans.

Treasurer—Mrs. W. R. Buffington, New Orleans.

Chairmen:

Press and Publicity—Mrs. John H. Musser, New Orleans.

Organization—Mrs. A. A. Herold, Shreveport.
Revision—Mrs. W. S. Kerlin, Shreveport.
Hygeia—Mrs. E. S. Hatch, New Orleans.
Legislation—Mrs. J. P. Brown, Monroe.
Public Relation—Mrs. I. I. Lemann, New Orleans.
Finance—Mrs. S. Chaille Jamison, New Orleans.
Historian—Mrs. H. B. Gessner, New Orleans.
Program on Education—Mrs. Stanley Scott, Lake Charles.
Councilors:
1st District—Mrs. H. E. Bernadas, New Orleans.
2nd District—Mrs. A. L. Levin, New Orleans.
3rd District—Mrs. P. A. Boykin, Jeanerette.
4th District—Mrs. R. G. Douglas, Shreveport.
5th District—Mrs. C. P. Gray, Monroe.
6th District—Mrs. E. M. Levert, St. Francisville.
7th District—Mrs. Olin W. Moss, Lake Charles.
8th District—Mrs. D. C. McBride, Alexandria.
Presidents of the Parish Auxiliaries:
Orleans—Mrs. S. M. Blackshear, New Orleans.
Caddo—Mrs. J. L. Scales, Shreveport.
Ouachita—Mrs. J. B. Vaughan, Monroe.
Calcasieu—Mrs. Geo. Kreeger, Lake Charles.
Webster—Mrs. J. B. Benton, Minden.
Morehouse—Mrs. R. B. Leavell, Bastrop.

The January meeting of the Woman's Auxiliary to the Orleans Parish Medical Society was held on the usual second Wednesday of the month, and it marked a reversal of policy for the organization has attained a growth that rendered it almost impossible to hold their meetings in the homes of their members, so it was deemed wise to change to The Orleans Club which has been secured for the rest of the year and the one to come. The debut at the Club was celebrated by a most interesting meeting given in honor of the mothers of our doctors, and judging by the attendance the idea of the President was a happy and appropriate one.

Dr. John Musser gave a talk on food, which was concise and interesting, giving us much food for thought. The Philanthropic Committee reported the disposal of 110 garments to different sources. One of our members, Mrs. Henry Ader, accompanied by Mrs. Gabriella Lavedan, gave us delightful vocal selection and gained our very sincere plaudits. Miss Marie DeGravelle presented some excellent piano solos which were enjoyed by all. After having been feasted in mind and ear we all joined together and had the always refreshing social hour.

The following is a condensed version of a most interesting, instructive, and worth while message from our National President, Mrs. Arthur B. McGlothan. She strongly advises an Advisory Council of doctors for each and every Parish Auxiliary, and desires that to be one of the goals for this year; that we should strive always to retain our members and keep all names classified from the beginning, so when some are lost in devious ways we will be able to check up. She suggests the card filing system to obtain this end. Of course many of our newly organized auxiliaries are stressing the social side and of course very rightly, for until we are unified we cannot even attempt any more serious work, but after the necessary preliminaries are over most of these organizations are settling down to philanthropic and educational work. She also touches on the press and publicity work, and advises all the chairmen to report their news to the National Chairmen so all auxiliaries will appreciate the splendid work the different ones are doing. Hygeia is again urged to be one of our definite aims as this magazine is published by the American Medical Association to meet the insistent demand of the layman for information concerning the functions and care of the human body. It is deemed wise that this request should be satisfied by authentic information. Mrs. McGlothlan speaks also of the necessity of each state President's attendance at the mid-year board meeting and the annual convention each spring, and suggests that sufficient funds be taken from each treasury for this object. In this short, rather sketchy condensation, I give Mrs. McGlothlan's splendid message to the different State Auxiliaries.

JAMBALYA.

Mrs. Blackshear, President of the Woman's Auxiliary to the Orleans Parish Medical Society, announced at their last meeting that Mrs. Joseph Hume had been appointed General Chairman for the coming American Medical Association meeting, which takes place in New Orleans in May.

New Orleans hopes to have a visit from Mrs. Walter Jackson Freeman in a short time. Mrs. Freeman will come down to see how matters are progressing for the coming American Medical Association meeting in May.

Take this Journal home to your wife so she may get conversant with the workings of the different Auxiliaries throughout her State and others.

Our National President, Mrs. McGlothlan, in September not only addressed the Woman's Auxiliary but also the convention of the Kentucky State Medical Association.

The Virginia Auxiliary is doing a good piece of work for they have adopted for their work

pre-natal and post-natal education, and pre-school examination of children.

Pennsylvania's Public Relations Committee shows that contacts have been made with Parent-Teacher Associations, Mother's Clubs, Women's Study Clubs, Red Cross Organizations, Tuberculosis Societies, Pre-School Clinic, Dental Clinics, and Crippled Children's Homes.

To the Oregon Auxiliary goes the prize for the best slogan, for at their "Stunt Dinner" the following one was suggested "Dictor's Lives Need Doctor's Wives", and also their How Do You Do? is well worth printing.

Some pay their dues when due.
Some when over due,
Some never do,
How do you do?

A very gracious au revoir was said or rather given by Mrs. S. E. Collom, Past President of the Woman's Auxiliary to the Southern Medical Association in the presentation of a gavel which she presented to the Woman's Auxiliary of the Louisiana State Medical Society.

AN INSTITUTE ON TUBERCULOSIS.

The Tuberculosis and Public Health Association of Louisiana, in cooperation with the Louisiana State Board of Health, through the courtesy of Dr. J. A. O'Hara, will hold a case finding institute on tuberculosis, on February 17-18. At this institute there will be a demonstration of the technic of tuberculin testing and a careful study of roentgen ray plates. Besides formal lectures and demonstrations, there will also be a series of round table discussion. The following out of State men will be present at this institute: Dr. Kendall Emerson, of New York, Managing Director of the National Tuberculosis Association; Dr. William Chas. White, Chairman of the Committee on Research of the National Tuberculosis Association; and Dr. Horton Casparis, of the Department of Pediatrics, Vanderbilt University, School of Medicine. In addition to these men, a half a dozen or more of the New Orleans and Louisiana State physicians interested in tuberculosis, and who have studied the disease from many aspects, have also indicated their interest in this institute sufficiently to present papers and subjects for discussion.

A Short History of Medicine.—Works on Medicine intended for popular consumption are often couched in the jubliant terms of victory. Yet there are whole departments in which no progress whatever has been made. We pride ourselves on the advance in knowledge of infectious disease which the germ theory has brought us, and yet we are utterly and completely ignorant of the two things about infectious disease which are the two things most worth knowing on that topic. Firstly, no man has conceived the way in which the parasites of disease first fastened themselves on the animal body, a specific parasite to a specific animal. In other words, we have not the least idea how diseases first begin. Secondly, no man has conceived a reason why diseases, distributed over a wide area and in many bodies, should vary in virulence from time to time, why, for instance a relatively mild condition, such as influenza, should suddenly devastate the world. It is easy to say that human resistance varies, but that is only to restate the problem in terms of which we know nothing. On these high topics of Medicine we know as much and as little as Hippocrates.

Moreover, if we turn to definite diseases, there are many conditions, and those among the most important, of which our ignorance is almost complete. Thus of the very common and painful diseases, muscular rheumatism and rheumatoid arthritis, we know hardly more than Hippocrates and our remedies are but little more effective than his. The common cold-economically the most important of all diseases, not excluding cancer and tuberculosis—has a vast literature, but the physician is almost helpless in its presence and can but let it run its course. Measles, whooping-cough, and influenza have become more deadly of late years. We have still no clear line of treatment for them. Nor have we any real insight into the nature of cancer. Those who reach advanced age have no better chance of life than they had two hundred years ago. Above all, it must be remembered that the great majority of deaths are caused by diseases theoretically preventible. There is a natural term of life which it is desirable that all should attain. Yet most of us will surely die a violent death as truly as though struck down by a felon's hand. Death from disease is an unnatural and a violent death.

Faced by facts of this order there are those who constantly urge increased activity in medical "research." But research can only be prosecuted by those who talents specially fit them for the work. With reason it may be and is doubted whether there are many in Western Europe or America who could profitably be employed on medical research who are not already so employed. It is easy to make investigations on a certain level, but those best qualified to judge are of opinion that the general level of medical research has fallen, not risen, of last years. The number of publications has multiplied mayfeld, but there are those who doubt if there is much increase in investigation of the first order.

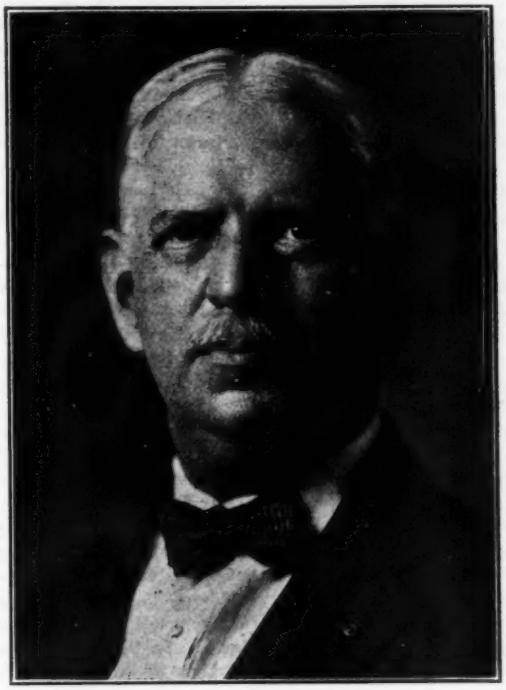
—Charles Singer, 1928.

MISSISSIPPI STATE MEDICAL ASSOCIATION NEWS

L. S. Lippincott, Editor
Jacob S. Ullman, Associate Editor *D. W. Jones, Associate Editor*

THAT WE MAY KNOW EACH OTHER BETTER

Dr. John W. D. Dicks was born on January 19, 1874, in Jefferson County, Mississippi. He was reared in the city of Natchez, attending school in Natchez and at Jefferson Military Academy near Natchez. After completing his high school course he entered Leland Stanford Junior University in California, matriculating in the science course with the view of preparing for the study of medicine. In 1895 he matriculated at Tulane University Medical Department, graduating therefrom in the class of 1899.



JOHN W. D. DICKS, M. D.
Natchez, Mississippi
Councilor, Eighth District.
Mississippi State Medical Association.

He was licensed in Mississippi in 1898, and shortly after graduation he began the practice of medicine in Natchez. In 1907, he was elected Surgeon-in-Charge of the Natchez Charity Hospital, a state institution. He remained in charge of this hospital until June, 1916. In 1914 he was elected a Fellow of the American College of Surgeons.

In June, 1916, he was called for active duty in the medical department of the Mississippi National Guard in federal service on the Mexican Border. He served as Major of the Medical Corps and Surgeon of the 155th Infantry from June, 1916, to September, 1917. At this time, the United States being at war with Germany, he was transferred to the 39 Division, U. S. Army, as Assistant Division Surgeon, serving in that capacity until March, 1918, when he was promoted to Lieutenant Colonel, Medical Corps, U. S. Army, and assigned to command the 114th Sanitary Train (Medical Regiment) of the 39th Division. This organization he accompanied to France during the summer of 1918. Shortly after reaching France he was detailed temporarily to organize and command Camp Hospital, No. 70, a fifteen hundred bed hospital at St. Florent, France. After completion of this tour of duty he returned to his command, which had in the meantime become the 7th Corps Sanitary Train attached to the 7th Corps, a part of the 3rd Army, A. E. F., on duty in Germany. He received an official citation for services rendered during the World War. Returning from army service in the spring of 1919, he resumed practice in Natchez.

He is a fellow of the American College of Surgeons, a fellow of the American Medical Association, a member of the Mississippi State Medical Association, Councilor of the Eighth District, Mississippi State Medical Association, Secretary of the Council, a member of the Southern Medical Association, a member of the Homochitto Valley Medical Society, and a member of the American Association of Railway Surgeons. He is also consulting surgeon for the Yazoo and Mississippi Valley Railroad; local surgeon for the Mississippi Central Railroad, acting assistant surgeon of the U. S. Public Health Service, field examiner of the U. S. Veterans' Bureau, and president of the staff of the Natchez Sanatorium. He is a Knight Templar of the Masonic Order, a member of the Benevolent and Protective Order of Elks, a Woodman of the World, and a member of Sigma Alpha Epsilon Fraternity.

Dr. Dicks' home is at 217 Linton Avenue and his office at 306 Franklin Street, Natchez.

CALENDAR.

February 1.—Staff of Jackson County Hospital, 2 p. m.; Staff of Meridian Sanitarium, 7:30 p. m.; Staff of South Mississippi Charity Hospital, Laurel, 7 p. m.; Staff of George C. Hixon Memorial Hospital, Electric Mills, 8 p. m.

February 2.—Staff of King's Daughters' Hospital, Brookhaven, 7:30 p. m.

February 3.—Staff of Chamberlain-Rice Hospital, Natchez; Staff of Vicksburg Infirmary, 7 p. m.; Staff of Rush's Infirmary, Meridian 7 p. m.; Staff of Dr. F. G. Riley's Children and Maternity Hospital and Clinic, Meridian, 7 p. m.

February 4.—Pike County Medical Society, McColgan Hotel, McComb, 7 p. m.

February 5.—Natchez Medical Club, 1 p. m.

February 8.—Staff of South Mississippi Charity Hospital, Laurel, 7 p. m.

February 9.—Staff of Natchez Sanatorium, 7 p. m.; Issaquena-Sharkey-Warren Counties Medical Society, Vicksburg, Y. M. C. A., 7 p. m.; Winston County Medical Fraternity, Louisville; Staff of Tupelo Hospital, 7:30 p. m.

February 10.—Staff of King's Daughter's Hospital, Greenville, 7 p. m.; Staff of Vicksburg Sanitarium, 6:30 p. m.; Harrison-Stone-Hancock Medical Society, King's Daughters' Hospital, Gulfport or The Biloxi, Biloxi, 7:30 p. m.

February 11.—Staff of Aberdeen Hospital, 8 p. m.; Staff of Vicksburg Hospital, 6:30 p. m.

February 12.—Staff of Anderson Infirmary, 7 p. m.

February 15.—Staff of South Mississippi Charity Hospital, Laurel, 7 p. m.

February 16.—Staff of Natchez Charity Hospital, 8 p. m.; Central Medical Society, Jackson, 7 p. m.

February 18.—East Mississippi Medical Society, Elks Club, Meridian, 3 p. m.

February 19.—Natchez Medical Club, 1 p. m.

February 22.—Staff of South Mississippi Charity Hospital, Laurel, 7 p. m.

February 29.—Staff of South Mississippi Charity Hospital, Laurel, 7 p. m.

March 1.—Claiborne County Medical Society, Port Gibson, 3 p. m.; Staff of King's Daughters' Hospital, Brookhaven, 7:30 p. m.

March 2.—Staff of Chamberlain-Rice Hospital, Natchez; Staff of Vicksburg Infirmary, 7 p. m.; Staff of Rush's Infirmary, Meridian, 7 p. m.; Staff of Dr. F. G. Riley's Children and Maternity Hospital and Clinic, Meridian, 7 p. m.

March 3.—Pike County Medical Society, McColgan Hotel ,McComb, 7:30 p. m.

March 4.—Natchez Medical Club, 1 p. m.

March 7.—Staff of Jackson County Hospital, 7:30 p. m.; Staff of Meridian Sanitarium, 7:30 p. m.; Staff of South Mississippi Charity Hospital, Laurel, 7 p. m.; Staff of George C. Hixon Memorial Hospital, Electric Mills, 8 p. m.

March 8.—Tri-County Medical Society, Copiah-Lincoln Junior College, Wesson; Staff of Natchez Sanatorium, 7 p. m.; Issaquena-Sharkey-Warren Counties Medical Society, Vicksburg, Y. M. C. A., 7 p. m.; Winston County Medical Fraternity, Louisville; Staff of Tupelo Hospital, 7:30 p. m.

March 9.—Staff of King's Daughters' Hospital, Greenville, 7 p. m.; Harrison-Stone-Hancock Medical Society, King's Daughters' Hospital, Gulfport, or The Biloxi, Biloxi, 7:30 p. m.

March 10.—Staff of Aberdeen Hospital, 8 p. m.; Staff of Vicksburg Hospital, 6:30 p. m.; Staff of Vicksburg Sanitarium, 6:30 p. m.

March 11.—Staff of Anderson Infirmary, Meridian, 7 p. m.

March 14.—Staff of South Mississippi Charity Hospital, Laurel, 7 p. m.

March 15.—North East Mississippi Thirteen Counties Medical Society Booneville, 2 p. m.; Natchez Charity Hospital, 8 p. m.; Central Medical Society, Jackson, 7 p. m.

March 16.—Clarksdale and Six Counties Medical Society, 7:30 p. m.

March 18.—Natchez Medical Club, 1 p. m.

March 21.—Staff of South Mississippi Charity Hospital, Laurel, 7 p. m.

March 28.—Staff of South Mississippi Charity Hospital, Laurel, 7 p. m.

STATE ASSOCIATION MEETS APRIL 12 TO 14.

"Mississippi State Medical Association,
"Office of the President, Oxford, Mississippi,
January 6, 1932.

"Dr. Leon S. Lippincott,
Mississippi Editor,
New Orleans Medical & Surgical Journal,
Vicksburg, Mississippi.

"Dear Dr. Lippincott:

"In reply to your letter of December 29, 1931, I wish to state that several months ago I sent out a letter vote to all of the members of the House of Delegates, asking for a vote on the change in the meeting dates of the State Medical Association. In that letter I suggested that we change the time of the meeting to April 26, 27 and 28, because of a conflict with the American Medical Association. The vote was unanimous for the change. A great many, however, left the dates open, stating that it might be possible that we would have to change it again.

"I later learned that the meeting of the State Teachers' Association, with a delegation of two thousand, will be held in Jackson on April 26, 27 and 28, so I have definitely decided to place the time of our meeting April 12, 13 and 14.

"You will understand that this letter vote was by no means legal but I was merely trying to get an expression from each member of the House of Delegates. I wish at this time through this letter to thank the members for a ninety-five per cent response. In order for our change of the time of meeting to be legal it will be necessary for me to call the members of the House of Delegates and have them to act on same. This meeting will be called on Monday evening, April 11, the

night before our regular annual meeting. In this way the change of date of the meeting will be legalized.

"I will thank you to give this letter a prominent place in your Journal this month."

"Yours very truly,

(Signed) John C. Culley,
President."

TO THE MEMBERS OF THE MEDICAL PROFESSION.

My attention has been called to an editorial which appeared several weeks ago in one of Mississippi's leading newspapers.

The editor of this particular paper has on many occasions used the expression, "Let us stick to the facts," in proving the error of his opponent's contention. In this editorial he failed to stick to the facts so far as figures are concerned and I feel it my duty to call attention to same. My only purpose in answering him now is to give the correct figures and state the true facts in regard to the subject to which he has called our attention. The purpose of his editorial was, in my opinion, well intended. It was timely. It was prompted by a desire, I am sure, to point to the members of our profession where we have been derelict in performing a duty, which is ours, and ours alone.

The very law which many of us are guilty of not observing is largely of our own making. Mississippi should be proud of the work of the State Board of Health. Especially should we take a pride in the Bureau of Vital Statistics. I doubt if there are many large corporations and few private individuals outside of our State, who, contemplating moving into the State, do not first seek valuable information from the Bureau of Vital Statistics. Foremost of importance is the birth and death rate.

To quote the editorial in question which appeared in the Jackson Daily News:

"Dr. Felix Underwood, state health officer, says there were nearly 9,000 births in Mississippi last year and one-sixth of the number were reported to the bureau of vital statistics from one to twelve months behind time. The same average will hold good on birth statistics for the first ten months of the current year.

"Commenting on this delinquency, Dr. Underwood offers some excellent reasons why all births should be promptly reported. Delays hamper the the work of the bureau, belated reports are often filled with errors, and it is impossible to prepare an accurate annual report.

"It is up to papa and mama to poke up the family physician. Perhaps it would be a good idea not to pay the doctor's bill until he has furnished you with a copy of the birth certificate.

"Anyhow, try it out on the physician the next time a baby arrives in your family."

The facts, as shown in Dr. Underwood's report, are that there were 47,982 children born in Mississippi in 1930, and of this number between 8000 and 9000 were registered from one to twelve months late. Midwives deliver about 42 per cent of the babies while physicians deliver 58 per cent. Thus, it will be seen that the physicians are not wholly responsible for the late registrations. I am informed by the Bureau of Vital Statistics that the number of physicians and midwives failing to register births is about equally divided.

It is interesting to note that when the State Board of Health began its work with the midwives and the educational work among the mothers with reference to prenatal care, the midwives were delivering 52 per cent and the physicians 48 per cent. Thus, you see the educational work has been of direct benefit to the physicians, the mothers and the babies.

The editor, I am pleased to note, has a sense of humor and makes the suggestion that papa and mama not pay the doctor's bill until he has furnished them with a copy of the birth certificate. It would be interesting to know just how many of the bills for the above 47,982 deliveries have been paid, regardless of the birth certificates. If I were permitted to answer in the same vein, my suggestion would be for the physician to refuse the birth certificate until the bill was paid. However, that is not the point. There is no defence. We can only plead guilty to the charge of carelessness in a matter that is very vital to every child born in our state.

The fact that Mississippi's record in birth registrations is no worse than that of any other state is no excuse. The remedy is simple. If the registrations in all the other states are as poor as in Mississippi, now is the best time in the world for us to take the lead. We are in the beginning of a new year. Let us resolve right now that we will register every birth and death in 1932. Let us form the habit of doing the "proper thing at the proper time." We are all supplied with the proper blanks. While waiting for the arrival of the baby we have plenty of time to secure all the data necessary for the completion of the certificate with one exception the name of the baby. If the parents cannot decide on a name explain to them that the certificate will not be mailed until the first day of the following month. If they cannot give a name by that time the report is mailed in without one. We have done our duty and any further responsibility is theirs. A good reminder is to circle the first of each month on our office calendar and then have your secretary or office girl to remind us what the circle is for. That is what she is paid to do. Seriously, let us each do our duty toward every helpless infant born in our practice and register its birth promptly and properly, as the law requires.

This is not a complaint against the newspaper or the editor. I have reason to believe that the editor is friendly toward the medical profession. We, as physicians, are indebted to the newspapers of the state for their willingness at all times to give freely of their space for notices of our meetings and all matters pertaining to the public health. The layman never reads medical journals. He depends largely on the newspapers for his information and he usually believes what he reads in them. Thus, the newspaper is a great moulder of public opinion. This particular editor, while professing, and I believe he is sincere, friendship for the profession, frequently takes a back hand slap at us. He likewise uses the pitchfork on the lawyer, the banker, and the politician. But, this particular editorial is calculated to leave the public with the wrong impression.

We should be grateful for the criticism and look upon it as a constructive one. Often times our severest critics are our best friends. Personally, I am thankful for this editorial which calls to our attention a shortcoming which we can so easily correct.

John C. Culley, President.

AMENDMENTS.

"Dear Mr. Editor:

"Noting in the January *Journal* the letter of Dr. Dye regarding sending amendments to the Constitution and By-Laws, I venture to call attention to some he does not mention.

"These were offered the second day of the meeting by Dr. E. H. Jones, to provide for the office of Sergeant-at-Arms, and contemplate changes in Sections 1 and 2 of Article VI of the Constitution, a change in Section 2, Chapter VI of the By-Laws and the addition of a new section to Chapter VII. Queerly enough, the amendments to the By-Laws have already been incorporated in the Laws as printed in the *Transactions*, although there is nothing in the minutes to show that any action on them was taken.

"It might also be well to arrange for further consideration of that By-Law quoted in Dr. Dye's letter providing that county secretaries pay no dues. The minutes of the last morning session of the House states that 'The following By-Laws introduced on yesterday by the Secretary were called up and adopted.' There must be a misprint here, for what follows are four amendments, not By-Laws, the second of which makes the provision mentioned. But there is nothing in the minutes of the preceding day to show that they had been introduced, and as such amendments 'must lie on the table for one day,' the question may well be raised whether these four, only three of which were incorporated in the By-Laws, were legally adopted. Therefore, they had better receive further action by the House and it might be well, pending such action, to have the Council express itself as to what course it will pursue, in the event that one of these non-paying secretaries gets involved in a malpractice suit. Nobody wants to be hypercritical in such matters, but the council is obliged to be pretty 'hard boiled' at times, and frequently refuses an application for defense because of non-compliance with technicalities. We give it a rather free hand in such matters and its actions have justified the confidence we repose in it, so an expression of its opinion on this question, to settle the membership status of twenty of our most active members, would certainly be in order."

(Signed) E. F. Howard.

OUR CHARITY HOSPITALS.

There are in Mississippi five charity hospitals receiving their maintenance wholly or in part from the State. The heads of these institutions are appointed by the Governor of the State. Under this arrangement, it is rare indeed that a suspicion of political preferment does not prevail. It is rare also for a man to head one of our charity hospitals by appointment of more than one governor. Ability and real accomplishment apparently count little. Knowing that whether he does much or little, whether he builds or tears down, he is going to be replaced in four years, where is the incentive to high endeavor?

We have learned that education and politics do not mix. We are now determined to remedy that situation. How much less should the care of human life be mixed with political gifts. Does the political affiliation of a doctor qualify him as a hospital admnistrator or surgeon? Would the result not be surer of real worth if the appointments were made by a board or commission in close touch with hospital affairs and with medicine?

The Mississippi State Medical Association is asking for the establishment of community hospitals, one of the grounds being that the present charity hospitals do not effectively serve the whole state because of location. One suggested means of obtaining money for community hospitals is to do away with the present charity hospitals and to take the funds now expended for their support for distribution among the 82 counties of the State.

Perhaps the Legislature will see fit to do this. There is no doubt of a need that is real for provision for caring for charity patients at long distances from the present charity hospitals. Some doubt the wisdom of destroying the long record of service of our charity hospitals for this purpose. Possibly a way may be found to give care to charity patients in all parts of the State and still maintain the institutions we now have.

But, if we are to continue with the present charity hospitals, let's improve them, let's make them real teaching institutions approved by every

association and college in the country, let's make them show places of the best in medicine of which we may all be proud. To do this, they must be headed by men chosen by civil service or similar plan, men who will hold their positions without fear of removal under good behavior and as long as they are getting results, men who will know that they will receive credit and recognition for work well done.

In Simpson County is a State institution, which is known for its outstanding work throughout the whole United States and even in many foreign countries. The man who heads that institution, our tuberculosis sanatorium, has made a name for himself as well known as the institution he serves. Would that institution now stand where it does had every incoming governor changed its administration? It would not. Free from politicial intervention and responsible to the State Board of Health, and removable only for cause, Dr. Henry Boswell has had an incentive to do his best, has done it and is still doing it.

Many efficient and excellent doctors and administrators have and are heading our State charity hospitals. It is not difficult to see where our charity hospitals might have been had those men had the opportunities and feeling of security that Dr. Boswell has enjoyed.

Perhaps our Legislature will do away with the charity hospitals. Perhaps it will decide that they are needed as well as community hospitals. If this be the case, the time is particularly ripe for a change for the better. The legislators were elected by a people aroused against political interference with state institutions. Those legislators should be very ready to better safeguard the health of our people at the same time that educational institutions are being "saved." The cost need be no more than in the past. It is even conceivable that it might be less under a policy of permanent heads for charity hospitals. Our hospitals could be made such teaching institutions for interne and post graduate study that there would be a constant demand for an opportunity for such service. We, as physicians of Mississippi, would be proud of our State charity hospitals, and would be better doctors from observing their work well done.

HISTORY.

The following abstracts from the history of the Mississippi State Medical Association are being printed in order that members of the Association may make any suggestions or corrections desirable before final publication. Please read carefully and communicate with Dr. E. F. Howard, Historian, Vicksburg, if you feel that any changes are to be made.

1925.—Legislation looking to the protection of young children from burns by lye and similar commodities of common used in homes was suggested at the 1925 meetings by the American Medical Association, which was endeavoring to obtain national and state laws governing the matter, and a bill to this end was introduced.

1926.—At the 1926 session of the Legislature; but the Committee became involved in a fight with Chiropractors, who were seeking the establishment of a Board of Examiners of their own, and the bill was pigeon-holed. It was not until 1930 when it was introduced by Senator Culkin of Warren County as a personal measure, entirely separate from Association affairs, that it became a law.

1927.—Vicksburg was to have been the scene of the 1927 meeting, but the disastrous floods in the Delta had so filled the city with refugees that accommodations were taxed to capacity and the members who lived there had their hands full of other business than that of entertainment, so the meeting was transferred to Jackson. The disaster that necessitated the change was not, however, passed unnoticed by the Association. One thousand dollars were given to the Auxiliary to purchase materials for making undergarments and layettes for the flood victims and a equal amount was placed in the hands of a relief committee to be used in meeting the immediate, urgent needs of members living in the overflowed territory. A third thousand was subscribed for Rehabilitation Corporation stock, but this was never called.

A substantial free-will offering was made by the members to meet the immediate needs of Dr. J. D. Westmoreland of Murphy, whose heroic work had been the means of saving many lives and alleviating much suffering, while costing him practically all of his own possessions.

1928.—Finances had the floor at the 1928 meeting and the question of an increase in dues came up for consideration. The Mississippi tax for membership in the Medical Association has always been a light one compared with that in other states, and yet there has never been a lack of necessary funds when something out of the ordinary was needed. But two-thirds of a total year's income had been given away the year before and there has been a considerable increase in the cost of many things, so an increase in dues amounting to thirty-three and a third per cent was suggested and the amendment to the By-Laws necessary for such action was passed.

1929.—A loss of membership on this account was generally predicted, but the activity of the president was such that an actual, though small, increase was shown for 1930, in

1930.—Which year the meeting was in Vicksburg, by way of recompensing that City for the loss of the 1927 session, and, as is customary when visitors are in that historic place ,the Association relaxed to a greater degree than usual and spent more time on pleasure.

COMMUNICABLE DISEASES.

The Bureau of Communicable Diseases of the Mississippi State Board of Health has announced that for the month of November, 1931, there were reported in the State 40 cases of typhoid fever; 44 of small pox; 391 of diphtheria; 154 of scarlet fever; 342 of pellagra; and 59 of tuberculosis.

While we as physicians cannot force everyone in the State to be immunized against those diseases in which artificial immunization is possible, are we doing all we can do to secure the immunization of our own patients or even of our own families? A determined stand at all times in this regard will accomplish much. Our State suffers by the publication of such statistics as those given above. Let's work a little harder for the health of Mississippi in 1932.

It is gratifying to know that 98.8 percent of the physicians of the State are making regular reports of communicable diseases. That will help.

ISSAQUENA-SHARKEY-WARREN COUNTIES MEDICAL SOCIETY.

The regular monthly meeting of the Issaquena-Sharkey-Warren Counties Medical Society was held at the Y. M. C. A., Vicksburg, January 12, with 21 members present. The scientific program included the following:

Symposium on Syphilis.—Dr. W. G. Weston, Vicksburg, chairman.

1. Ocular Manifestations of Syphilis.—Dr. E. H. Jones, Vicksburg.

2. Cutaneous Lesions of Syphilis.—Dr. W. E. Akin, Jr., Vicksburg.

3. Complications in the Treatment of Syphilis. —Dr. W. G. Weston, Vicksburg.

Discussions by Drs. P. S. Herring, Vicksburg; J. A. K. Birchett, Jr., Vicksburg; G. P. Sanderson, Vicksburg; H. H. Haralson, Vicksburg; F. M. Smith, Vicksburg; H. S. Goodman, Cary; S. W. Johnston Vicksburg; N. B. Lewis, Vicksburg. Discussion closed by Drs. Jones, Akin, and Weston.

The Surgical Treatment of Peptic Ulcers (A Moving Picture), shown by Drs. S. W. and W. E. Johnston, Vicksburg, by courtesy of Davis and Geck, Inc., Brooklyn, New York.

The Secretary's report for the year of 1931, showed:

Membership—Issaquena County, 3; Sharkey County, 7; Warren County, 30; Life members, 2; Honorary members, 2, a total of 44, which was the same as for the preceding year.

Meetings—11 regular meetings. No meeting was held in May because of conflict of dates with the meeting of the Mississippi State Medical Association. Two joint meetings were held with the Fifth District Medical Society of Louisiana, one in Monroe in June, and one in Vicksburg in December. Two joint meetings were held with the Central Medical Society, one in Jackson in April and one in Vicksburg in July.

Attendance at Meetings—Members attended 216 times, an average of 20 at each meeting or 54 per cent as against 40 per cent last year. Visitors attended 92 times, an average of eight at each meeting. The total attendance for the year was 308, an average of 28 at each meeting.

Presenting Papers—Papers were presented by 21 members or 48 per cent, as against 16 or 36 per cent in 1930. Papers were presented by six visitors.

Dr. W. G. Kiger, Brunswick, and Dr. H. B. Wilson, Vicksburg, were unanimously elected to honorary membership in the Society.

President H. S. Goodman announced the appointment of the following committees:

Auditing: Drs. J. A. K. Birchett, W. H. Parsons and P. S. Herring.

Public Health and Legislation: Drs. G. M. Street, I. C. Knox and B. B. Martin.

The Program Committee announced committees to have charge of the monthly scientific programs for the year as follows:

January.—Dr. W. G. Weston, chairman; Dr. W. E. Akin, Jr.; Dr. A. K. Barrier, Dr. E. H. Jones.

February.—Dr. W. E. Johnston, Vicksburg, chairman; Drs. E. B. Stribling, Rolling Fork, M. H. Bell, Vicksburg, G. M. Street, Vicksburg.

March.—Dr. J. A. K. Birchett, Jr., Vicksburg, chairman; Drs. J. B. Benton, Valley Park; A. Street, Vicksburg; J. A. K. Birchett, Vicksburg; C. J. Edwards, Vicksburg.

May.—Dr. F. M. Smith, Vicksburg, chairman; Drs. L. J. Clark, Vicksburg; W. H. Scudder, Mayersville; V. Bonelli, Vicksburg; D. P. Street, Vicksburg.

June.—G. P. Sanderson, Vicksburg, chairman; Drs. R. H. Foster, Anguilla; G. W. Gaines, Tallulah, La.; Dr. J. S. Ewing, Vicksburg.

July.—Dr. J. E. Quidor, Vicksburg, chairman; Drs. H. B. Goodman, Vicksburg; W. C. Pool, Cary; M. J. Few, Rolling Fork; T. A. Heath, Shiloh.

August.—Dr. A. J. Podesta, Vicksburg, chairman; Drs. H. S. Goodman, Cary; H. H. Haralson, Vicksburg; T. W. Huey, Grace.

September.—Dr. W. H. Parsons, Vicksburg, chairman; Drs. D. A. Pettit, Vicksburg; P. S. Herring, Vicksburg; B. B. Martin, Vicksburg. man; Drs. E. F. Howard, Vicksburg; L. S. Lippincott, Vicksburg.

October.—Dr. C. C. Jarratt, Vicksburg, chair-

November.—Dr. N. B. Lewis, Vicksburg; Dr. S. W. Johnson, Vicksburg; Dr. B. T. Orendorf, Rolling Fork; Dr. I. C. Knox, Vicksburg.

The next meeting of the Society will be held at the Y. M. C. A., Vicksburg, February 9, at 7 p. m.

CENTRAL MEDICAL SOCIETY.

The last monthly meeting of the year of the Central Medical Society was held on December

22, at the Edwards Hotel, Jackson. There were present 79 members and a few guests. After a banquet, a business meeting was called, President C. L. Green presiding. For the scientific program, Dr. R. C. O'Ferrell read a paper on obstetrics, giving a report on some of the newer methods developed at the New York Lying-in Hospital. Dr. G. S. Adkins read a paper on allergy, discussing some of the newer theories, especially the cellular theory and its relation to such diseases as hay fever and asthma. Dr. J. P. Wall read a paper on State medicine and the industrialization of medicine, discussing the tendency towards those things.

The following officers were elected:

President—Dr. Julius Crisler, Jackson.

Vice-Presidents—Dr. T. J. Crofford, Hinds County; Dr. R. W. Smith, Madison County; Dr. W. H. Watson, Rankin County; Dr. A. E. Kennedy, Simpson County; Dr. O. O. Austin, Scott County; Dr. J. T. Rainer, Yazoo County.

Secretary—Dr. Robin Harris, Jackson.

Delegates to the Mississippi State Medical Association—Hinds County, Dr. J. P. Wall, alternate Dr. H. F. Garrison; Dr. N. C. Womack, alternate Dr. L. W. Long; Madison County, Dr. J. B. Howell, alternate, Dr. L. C. Jones; Rankin County, Dr. R. N. Whitfield, alternate Dr. W. H. Watson; Simpson County, Dr. E. L. Walker, alternate Dr. Henry Boswell; Scott County, Dr. W. C. Anderson, alternate Dr. R. B. Austin; Yazoo County, Dr. J. B. Anderson, alternate Dr. Carl Day.

Medico-Legal Committee—Hinds County, Dr. W. E. Noblin; Madison County, Dr. J. B. Howell; Rankin County, Dr. W. H. Watson; Simpson County, Dr. S. L. Knight; Yazoo County, Dr. John Darrington; Scott County, Dr. R. B. Austin.

Program Committee—Dr. A. G. Wilde, Jackson, chairman; Dr. J. P. Wall, Jackson, vice-chairman; Dr. J. W. Barksdale, Jackson; Dr. R. W. Hall, Jackson; Dr. L. W. Long, Jackson.

Board of Directors—Dr. John Darrington, Yazoo City; Dr. J. W. Barksdale, Jackson; Dr. J. P. Wall, Jackson; Dr. O. H. Swayze, Yazoo City; Dr. R. W. Hall, Jackson; Dr. C. L. Green, Utica.

D. W. Jones.

KOCH'S ANNOUNCEMENT OF THE TUBERCLE BACILLUS.

Mr. Logan H. McLean, Executive Secretary of the Mississippi Tuberculosis Association, has announced that in the March issue of the American Review of Tuberculosis, Koch's announcement of the discovery of the tubercle bacillus will appear in English for the first time. An introduction for this paper by Dr. Allan Krause is contemplated. Because of many suggestions that this article be reprinted for general distribution in connection with the celebration of the fiftieth anniversary of Koch's discovery, the National Tuberculosis Association has undertaken publication in the form of a forty-page bound volume.

Because of the historical as well as the practical value of Koch's paper, it is likely that many medical men will want a copy. The Mississippi Tuberculosis Association, with headquarters at 501 Old Merchants Bank Building, Jackson, will supply this volume to members of the medical profession at cost, which will depend upon the number of copies ordered. The cost will not exceed 50 cents and it may possibly be as low as 25 cents.

DESOTO COUNTY.

At a recent meeting of the DeSoto County Medical Society the following officers were elected for 1932:

President—Charles Whitley Emerson.

Vice-President—Alex J. Weissinger.

Secretary-Treasurer—L. L. Minor.

A. J. Weissinger was elected delegate to the State Association with A. L. Emerson as alternate.

Mr. J. M. Weissinger, aged 84 years, a Confederate Veteran and father of Dr. A. J. Weissinger, died recently at his home in Hernando.

Dr. J. A. Rhodes, Horn Lake, who has been somewhat indisposed for several weeks, is improving. The doctor is much elated over the fact that he is now a grandfather. His daughter Ruth, Mrs. David Hughes, is the mother of a fine boy.

L. L. Minor, County Editor.

ISSAQUENA COUNTY.

Two out of Issaquena's four physicians are members of the county board of supervisors, one of them being president of the board. This speaks well for the doctor. The people have faith in their integrity, as well as their business ability. It is an indication of the return of the old time country doctor, whom the people use to love, confided in, and trusted. It takes times of adversity and financial distress to bring people to their senses and set them right. We take this as a sign of better times ahead.

W. H. Scudder, County Editor.

VICKSBURG SANITARIUM.

The regular monthly meeting of the staff of the Vicksburg Sanitarium was held on Monday, January 11. After transacting the business of the staff and an analysis of the work of the hospital for the past month, the following special case reports were presented:

Subdeltoid Bursitis.—Dr. A. Street.

Fracture of the Patella.—Dr. J.A. K. Birchett, Jr.

Three minute reports on the literature of the month were made by Drs. L. S. Lippincott, J. A. K. Birchett, Jr., L. J. Clark, and G. C. Jarratt.

Selected radiographic studies were demonstrated as follows: Fracture of femur, Lane plate; healed

tuberculosis of thoracic spine; osteomyelitis of femur with associated chronic inflammatory of other femur; abscess of fourth lumbar vertebra, fusion as end result; subdeltoid bursitis.

Dr. W. E. Johnston presented a moving picture, "Peptic Ulcer," by courtesy of Davis and Geck.

The report of the secretary for 1931 showed: members of active staff, 7; intern, 1; numbers of courtesy staff, 4; number of regular meetings held, 12; attendance of staff members, 115; average, 9.6; attendance of visitors, 35; average, 2.9; total attendance, 150; average, 12.5.

The next meeting of the staff will be held on Wednesday, February 10.

The meeting closed with a lunch.

WARREN COUNTY.

Dr. R. E. Cutts of the Mayo Clinic spent a few days with Dr. W. H. Parsons recently.

Dr. W. E. Johnston visited his brother, Dr. Hugh Johnston, at the Mayo Clinic in December.

Edley H. Jones, County Editor.

WASHINGTON COUNTY.

Dr. T. L. Dobson, Leland, is vacationing in Hot Springs, Ark.

Dr. Paul Gamble, Greenville, attended the birthday party of Dr. Matas in New Orleans.

Dr. K. L. Witte, Leland, has returned home after a three weeks' stay in the hospital. Dr. Witte has greatly improved, much to the delight of his many friends, but is still confined to his bed.

Dr. Virgil Payne, Greenville, leaves within a short time for Florida to spend the remainder of the winter recuperating from a recent operation.

Dr. Paul Gamble, Greenville, visited the Vanderbilt Hospital at Nashville, Tenn., during the Christmas holidays.

Dr. A. G. Payne, Greenville, president of the Mid-South Post Graduate Medical Assembly, formerly the Tri-States Medical Association of Mississippi, Arkansas and Tennessee, invites and urges the attendance of not only the members of the medical profession in Washington County, but all members in Mississippi to attend the annual meeting, which take places in Memphis, February 9 to 12, inclusive. He states that a particularly interesting and valuable program has been arranged for this meeting.

F. M. Acree, County Editor.

LEFLORE COUNTY.

Dr. R. B. Yates has returned to Greenwood to continue the practice of his profession after an absence of a year.

Dr. Yates will be joined by his family about January 15, and they will again occupy their home on River Road.

W. B. Dickins, County Editor.

MONROE COUNTY.

Good-bye, Thirty-one; howdy, Thirty-two. Much water has flown over the dam this year; how about the grist? I sincerely hope that each of us has striven to add something to the sum of human happiness and to the advancement of the knowledge of medical science.

Your correspondent attended the recent meeting of the Southern Medical Association. It was, indeed, a great meeting—perhaps the greatest in its history both in point of attendance and general interest. The program was full and the personnel and standing of the essayists was the very best, many of the nation's foremost men appearing on the list. Our own Dr. Underwood presided with his customary poise, equanimity and dignity. Mississippi and Mississippi doctors have just cause to be proud of him. Your correspondent drove, or rather rode, down to New Orleans with Dr. M. Q. Ewing and his very engaging wife, in their new automobile. The trip was without untoward incident and most enjoyable, indeed.

The Thirteen-County Medical Society held its last quarterly meeting for the year 1931, in Tupelo, on December 15. This meeting was up to standard in all particulars. We were very happy to have as our special honor guest on the program, Dr. W. D. Haggard. Every one who knows Dr. Haggard knows that his lecture was both interesting and instructive. We had other able and welcome visitors. Among these were Drs. Culley and Mull of "Ole Miss" and several of our good friends from Memphis. They are always welcome and we hope they will continue to visit with us on these quarterly meetings. After the scientific program was completed, officers for the ensuing year were chosen. Dr. W. C. Spencer of Tupelo was chosen to serve as president. Dr. Spencer is one of the districts oldest physicians. He has been a faithful member of the society since its organization. He is the father of two doctor sons who are well established in the profession. One is a member of this society; the other lives and works in one of the cities of Texas. Our society was very glad to pay tribute to one who has proven himself worthy and most deserving. In fact, we simply acknowledged the honor that Dr. Spencer has conferred on us by his life of service and loyalty. In the words made immortal by the great Joe Jefferson, "May he live long and prosper." Of course, Dr. Acker was re-elected secretary. It is not saying too much to state that much of our prestige among sister societies is due to the loyal and efficient service rendered by Dr. Underwood during his long incumbrance of the secretarial office and that of Dr. Acker since his succession to the arduous duties of the service.

As evening came on, we repaired to Hotel Tupelo, where we were banqueted in wonderful

style by the Tupelo members. While we ate and cultivated "the tie that binds" we were entertained by one of the state's sweetest singers (I mean the singing is sweet, not the singer; for it happens that the singer is a *man*), namely, Mr. Paul Ballard of Tupelo. At the close of the banquet, Dr. Casa Collier of Memphis told us of his trip into "darkest Africa" and showed the pictures of his trophies in the hunt.

Our next meeting will be at Booneville on the 15th of March. "Come one, come all."

Yours for a better year's service.

G. S. Bryan, County Editor.

TRI-COUNTY MEDICAL SOCIETY.

The Tri-County Medical Society met in its regular annual session in Brookhaven, December 8, President F. E. Collins in the chair.

After the reading of the minutes of the last meeting and consideration of a few local matters, the election of officers for the coming year was taken up. The result was as follows:

President—Dr. A. B. Harvey, Tylertown.

Vice-Presidents—Dr. J. H. Beavers, Wesson, for Copiah County; Dr. R. E. Higdon, Brookhaven, for Lincoln County; Dr. R. Reagan, Tylertown, for Walthall County; Dr. J. W. Wilson, Monticello, for Lawrence County.

Secretary and Treasurer—Dr. H. R. Fairfax, Brookhaven.

Censor for Three Years—Dr. B. S. Waller, Silver Creek, for Lawrence County.

Medico-legal Commission—Dr. W. H. Frizell, Brookhaven.

Delegates to Mississippi State Medical Association—Dr. W. L. Little, Wesson, for Copiah County; Dr. O. N. Arrington, Brookhaven, for Lincoln County; Dr. R. E. Sylverstein, Tylertown, for Walthall County; Dr. T. F. Conn, Monticello, for Lawrence County.

Legislator Commission—Dr. W. L. Little, Copiah County; Dr. O. N. Arrington, Lincoln County; Dr. A. B. Harvey, Walthall County; Dr. T. F. Conn, Lawrence County.

H. R. Fairfax, Secretary.

MISSISSIPPI STATE BOAD OF HEALTH.

The following men were granted four month's postgraduate courses at Tulane, beginning January 4, 1932. These fellowships are available under the Commonwealth Fund's plan of co-operation with the Mississippi State Board of Health. The physicians take general courses or "brush up" on any specialty in which they may be engaged.

State-at-large—Dr. L. B. Austin, Rosedale; Dr. B. B. Harper, Bena; Dr. R. R. Halfacre, Sumrall; Dr. D. R. Moore, Byhalia; Dr. W. S. Slaughter, Jonestown.

Lauderdale County—Dr. James Bennett, Meridian; Dr. C. T. Burt, Meridian; Dr. R. E. Fowler, Meridian, Dr. B. L. Robinson, Meridian, Dr. T. J. Smith, Meridian.

Pike County—Dr. J. E. Brumfield, Magnolia; Dr. W. C. Hart, McComb; Dr. G. W. Robertson, Magnolia; Dr. M. D. Ratcliff, McComb; Dr. J. M. Smith, Magnolia.

The following were recent visitors to the Mississippi State Board of Health: Dr. John H. Janney, Director Anne Arundel County Health Department, Annapolis, Maryland; Dr. Clarence L. Scamman, Director, Public Health Division, The Commonwealth Fund, New York, N. Y.; Dr. L. L. Lumsden, Medical Officer, U. S. Public Health Service, New Orleans, Louisiana; Dr. John Thames, County Health Officer, Charleston, West Virginia; Dr. Wilson G. Smillie, School of Public Health and Hygiene, Harvard University, Boston, Massachusetts; Dr. James E. Sidel, National Child Labor Commission, New York, N. Y.

At the annual Health Officers' and Inspectors' Conference held in Jackson on December 17 and 18, there were ninety-two present.

The regular meeting of the Mississippi State Board of Health was held in Jackson on December 17th, 1931. The following men were liscensed to practice medicine: Dr. Elmer D. Gay, Gulfport; Dr. Dennis C. Stoudenmire, Walnut Grove; Dr. William G. Weston, Vicksburg; Dr. Sharkey Wolfe, Chatham; Dr. George K. Sims, Laurel; Dr. John F. Busey, Jr., Biloxi; Dr. Thomas J. Perkins, Hazelhurst; Dr. Vernon B. Harrison, Clarksdale; Dr. Hewitt H. Robinson, Meridian; Dr. Felix J. Harrell, Jr., Biloxi.

Ernest James Hoskins, an osteopath from Illinois, was granted license to practice osteopathy. He is located at Arcola.

LAUDERDALE COUNTY.

Dr. Chas. T. Burt is doing post-graduate work at Tulane University, as are Dr. R. E. Fowler, Marion; Dr. James Bennett, Meridian and Dr. J. T. Smith, Meridian.

A class of five will complete their courses in post-graduate work at Tulane University on February 15. These are: Drs. C. J. Lewis, T. L. Bennett, E. B. Key, R. M. Leigh, of Meridian; and R. J. Wilson of Bailey.

All of the above received fellowships at the hands of the Commonwealth Fund of New York, which is operating in Mississippi in Lauderdale and Pike Counties.

C. T. Burt, County Editor.

PONTOTOC COUNTY.

New Year Greetings from Pontotoc County, the best county in Mississippi. Pontotoc County is located in the Northern part of the state and

the 1930 census gave us a population of 22,034. We have 16 doctors in the county. Only three of these are inactive. According to population, Pontotoc county has less sickness than any county in the state.

At the meeting of the Northeast Mississippi Thirteen County Medical Society, on December 15, Dr. W. C. Spencer, Tupelo, was elected president. All of the other officers were re-elected for another year. The next meeting of this society will be held at Booneville in March. The second meeting will be held at Amory.

The last staff meeting of the Houston Hospital was held at Houston on December 31.

Dr. J. D. Simmons, Gunnison, was a visitor in Pontotoc during the holidays.

R. P. Donaldson, County Editor.

NORTH MISSISSIPPI MEDICAL SOCIETY.

The North Mississippi Medical Society met at Water Valley, December 15, 1931, and was addressed by Dr. Casa Collier of Memphis, who exhibited motion pictures of his recent big game hunt in Africa. The Society was also honored with the presence of Rev. Gayle Beanland who has been a missionary in Africa for the past twenty years and who was the cordial host of Dr. Collier on his visit to Africa.

The wives and friends of many of the members of the Society attended the meeting and enjoyed Dr. Collier's address and motion pictures.

The officers for 1932 were elected as follows:

President—Dr. H. P. Boswell, New Albany.

Vice-Presidents—From Benton County, Frank Ferrell, Ashland; Lafayette County, E. S. Bramlett, Oxford; Marshall County, C. R. Senter, Byhalia; Panola County, W. C. Lester, Batesville; Tippah County, R. M. Adams, Ripley; Union County, C. M. Speck, New Albany; Yalobusha County, D. C. French, Water Valley.

Secretary—A. H. Little, Oxford.

A. H. Little, Secretary.

EAST MISSISSIPPI MEDICAL SOCIETY.

The East Mississippi Medical Society met in the Lamar Hotel, Meridian, December 17, 1931, with 46 members and four guests present. Dr. A. L. Majure presided and Dr. H. L. Rush acted as secretary.

The following program was rendered:

1. Foreign Bodies in the Food and Air Passages—Dr. Robin Harris, Jackson.

Discussed by Drs. H. L. Arnold, G. L. Arrington and J. S. Hickman.

2. The Right Side of the Heart and Pulmonary Pathology—Dr. Leonard Hart, Meridian.

Discussed by Dr. T. D. Bourdeaux.

3. Wounds and Their Treatment—Dr. V. B. Philpot, Houston.

Discussed by Dr. A. C. Bryan.

4. Pneumonia—Dr. O. Simmons, Newton.

Discussed by Drs. M. J. Lowry, G. W. Bounds and J. S. Hickman.

The following officers were selected for 1932:

President—Dr. J. S. Hickman, Philadelphia.

Vice-Presidents—From Lauderdale County, Dr. G. L. Arrington; from Newton County, Dr. M. L. Flynt; from Neshoba County, Dr. W. R. Hand; from Winston County, Dr. T. F. Kilpatrick.

Delegates to the Mississippi State Medical Association—From Lauderdale County, Dr. M. J. L. Hoye; Alternate, Dr. K. T. Klein; from Winston County, Dr. T. F. Kilpatrick; Alternate, Dr. E. R. Richardson; from Newton County, Dr. J. L. Parkes; Alternate Dr. Z. C. Hagan; from Neshoba County, Dr. W. H. Banks, Alternate, Dr. J. S. Hickman.

Board of Censors—From Lauderdale County, Dr. R. M. Leigh; from Winston County, Dr. W. W. Parkes; from Newton County, Dr. M. L. Flynt; from Neshoba County, Dr. A. L. Majure.

Secretary—Dr. T. L. Bennett, Meridian.

Medico-Legal Advisor—Dr. I. W. Cooper.

A motion was carried accepting an item of $650 placed in the 1932 budget of Lauderdale County for the purpose of clinical conferences. This donation is being made by the Commonwealth Fund of New York through the efforts of Dr. F. J. Underwood, executive officer of the Mississippi State Board of Health.

The following committee was appointed by President J. S. Hickman to arrange for these conferences: Drs. C. R. Stingily, chairman; L. V. Rush, K. T. Klein, F. G. Riley, and W. J. Anderson.

Resolutions of respect to the late Dr. W. G. Gill, Newton, as written by a committee consisting of Drs. I. W. Cooper, Z. C. Hagan, and Dudley Stennis, were presented by the chairman, Dr. Cooper, and adopted.

A motion by Dr. H. L. Rush was passed amending the By-Laws so that the secretary will have full rights of membership without payment of dues.

On December 27, 1931, the following committee was appointed by President Hickman to arrange for a series of lectures in Meridian by Dr. C. L. McCord of Atlanta, Georgia, sponsored by the State Board of Health, and to begin about Monday, February 8, 1932: Dr. J. T. Googe, chairman; Dr. I. W. Cooper, Dr. G. L. Arrington.

T. L. Bennett, Secretary.

DR. WILLIAM GREGG GILL.

In the loss of Dr. William Gregg Gill, the American Medical Association, the Southern Medical Association, the Mississippi State Medical Association and the East Mississippi Four

County Medical Society have lost a very valuable and influential member and his advice and counsel will be sadly missed.

Dr. Gill was a native Mississippian, a graduate of Tulane University of Louisiana in medicine and served his internship in the Charity Hospital in New Orleans, Louisiana. Following this internship, he attended the Army Medical School at Washington and after completing this course resigned to return to his native state to practice medicine.

He first began the practice of medicine at Crystal Springs, Mississippi, and in a few years moved to Newton, Mississippi, where he purchased the Newton Sanatorium and this he operated for a number of years.

Dr. Gill was very active in organized medicine, being a very active member of this Society and serving as Counselor in the State Medical Association for many years.

Dr. Gill was taken sick early in 1931 and was sick for many months. His suffering and sickness he bore with great fortitude and in August, 1931, at the Baptist Hospital in New Orleans, Louisiana, his beautiful spirit went out into the realms of immortality. His body was returned at his request to Newton, Mississippi where amid a great concourse of sorrowing friends the funeral services were conducted and immediately after, his body was taken to Clinton, Mississippi, his birthplace and old home, where all that was mortal of this devoted friend and physician was laid to rest by the side of his loved ones who had gone before him and we feel that, "After life's fitful fever, he sleeps well."

WHEREAS—We realize that a great and good man has fallen and that we feel that this association has sustained an irreparable loss; therefore

BE IT RESOLVED—That in the death of Dr. William Gregg Gill this Association has lost one of its most useful and faithful members.

BE IT RESOLVED—That this life, character and self-secrificing services command our highest admiration.

BE IT RESOLVED—That a copy of these resolutions be furnished his devoted wife and lovely daughter and a page of our minutes be set apart for these resolutions, that they be printed in our Official Journal and in the Newton Record.

(Signed) I. W. Cooper, Chairman.
Dudley Stennis,
Z. C. Hagan.

CHOCTAW COUNTY.

We have little news at this time. There is no hospital in this county, therefore, we have no report from that source.

Miss Mary Ann Arnold, the youngest child of Dr. and Mrs. W. D. Arnold, recently had an attack of appendicitis.

Dr. M. P. Jurney, formally of Longview, is now located at Ackerman.

J. James, County Editor.

HUMPHREYS COUNTY.

Dr. and Mrs. J. C. Higdon, spent Christmas day with friends at Rolling Fork.

Dr. and Mrs. J. A. Wadlington, visited their son, Dr. J. E. Wadlington at Florence. Dr. J. E Wadlington is a graduate of the University of Tennessee in the class of 1931.

Dr. J. R. Jackson, a graduate of the University of Tennessee in the class of 1931, and now holding an internship at the City Hospital, Philadelphia, Pennsylvania, spent Christmas with his parents at Belzoni. Dr. Roberts expects to specialize in obstetrics and gynecology.

Welcome 1932. Thrice welcome Dr. Bill Noblin, son of Dr. W. E. Noblin, Jackson. Bill was our sanitary inspector for some two years or more and is now a two-year student at Oxford and student intern. We hope for these bright young doctors a happy and prosperous future. I feel sure I express the sentiment of all real doctors when I admonish them to hold sacred the Oath of Hipprocrates. If they have chosen their profession for the good they may do mankind, may God bless them, but if they have chosen hoping to gain fame and fortune, may God pity them.

Dr. and Mrs. G. M. Barnes and two boys spent the holidays, with Mrs. Barnes' sisters at Red Lick.

I have been on the sick list for some time having my molars lifted, antrum drilled for oil or other fluid, diet restricted or rather eliminated, just sailing along nicely on grape juice, tomato juice, rye bread and black coffee. Guess I will have to check and double check the Delta Medical Association, since my doctor says, no more CORN.

Dr. W. S. Taylor, Isola, is a new member of our board of supervisors. Although we have high water, no money, no sickness, still we feel sure the old canoe will ride the waves of dispair safely with such a fine man as Dr. Taylor wielding the paddle.

G. M. Barnes, County Editor.

HOUSTON HOSPITAL.

The monthly staff meeting of the Houston Hospital was held Thursday evening, December 31. There were about thirty doctors present from Chickasaw and surrounding counties.

Dr. V. B. Philpot gave a splendid paper on "Wounds and Their Treatment," which was dis-

cussed in turn by each doctor present. After this discussion the business of the meeting was taken up. Refreshments were served, and the meeting was adjourned until four weeks.

William C. Walker.

WOMEN'S AUXILIARY.

The Women's Auxiliary of the Issaquena-Sharkey-Warren Counties Medical Society met at the Public Library, Vicksburg, December 15.

After the regular business was disposed of the nominating committee reported and the following officers were elected:

President—Mrs. W. C. Pool, Cary.

First Vice-President—Mrs. H. B. Goodman, Cary.

Second Vice-President—Mrs. J. B. Benton, Valley Park.

Third Vice-President—Mrs. Edley H. Jones, Vicksburg.

Secretary—Mrs. M. H. Bell, Vicksburg.

Treasurer—Mrs. Preston Herring, Vicksburg.

Parliamentarian—Mrs. E. F. Howard, Vicksburg.

The retiring President, Mrs. E. F. Howard, in a pretty little speech presented to Mrs. Pool a gavel which she stated was made, by a local concern, of wood taken from the old Porterfield home which was used as a hospital during the siege of Vicksburg and on the staff of which Dr. E. F. Howard's father had served.

The officers will be installed at the regular meeting in January.

Mrs. M. H. Bell, Secretary.

PONTOTOC COUNTY.

Since writing you last, the members of the Northeast Mississippi Thirteen Counties Medical Society have had a big day. The meeting was held at Tupelo the third Tuesday in December. The attendance in general was fine, yet the attendance of Pontotoc county doctors was a little below the average. There were two big items on this program in addition to the regular routine of instructive papers and discussions. The extras were Dr. William D. Haggard of the surgical staff of Vanderbilt on "The Acute Abdomen," and moving pictures of modern goiter operation and Dr. Collier of Memphis who gave a lecture and moving picture of his experiences in Africa. Dr. Haggard gave one of his usual easy and graceful yet dignified lectures on the acute abdomen. He thoroughly covered the subject and any one could make a much better diagnosis of this common condition after hearing him. After a splendid dinner at Hotel Tupelo, Dr. Collier delighted the audience with a graphic description of the thrills of the elephant and hippopotamus hunter in Africa. After the lecture followed moving picture reels of the very things he had told about. The meeting was highly instructive and the lecture and pictures highly enjoyable.

Dr. Spencer of Tupelo was elected our president for 1932. Dr. J. W. Gillespie of Sherman was elected vice-president for Pontotoc county. All members of the House of Delegates were retained for another year.

Among the visitors were Dr. John C. Culley of Oxford and Dr. Mull of University. Both made very interesting talks. Quite a number of Memphis doctors were present and added much to the discussion of the papers.

Dr. Dempsey of Toccopola has moved to Potts Camp.

Everything is very quiet with the doctors in general in Pontotoc County. Though we are above high water mark so far as floods are concerned, our roads are wet and continued rains make it very disagreeable.

Our next quarterly meeting will be held at Booneville the third Tuesday in March.

Eliam B. Burns, County Editor.

ADAMS COUNTY.

Dr. Dunbar Shields, who graduated from Tulane Medical School last year, and is now an interne at St. Luke's Hospital, New York City, spent the Christmas holidays with his parents, Dr. and Mrs. J. D. Shields, at Pine Ridge.

Dr. and Mrs. Raymond Smith, Devereux, had as their guest Dr. Smith's sister, Miss Myra Smith, of Chicago, Mrs. Smith's brother, Dr. Spurgeon Taylor and daughters, Misses Annie Laurie and Josephine Taylor of Tuscaloosa, Alabama, Miss Mildred Darby of Charleston, and Mr. and Mrs. Tom C. Taylor of Memphis.

Prior to the midnight show on New Year's Eve, Dr. and Mrs. Philip Beekman were hosts at an informal but delightful gathering of friends. A buffet supper was served and midnight theater party followed.

Dr. and Mrs. W. H. Aikman had as guests during the Yuletide season Mr. and Mrs. Shields Dunbar, former Natchexians.

Miss Nita Beer returned to her home in New Orleans recently after a visit of two weeks as a guest in the home of her brother-in-law and sister, Dr. and Mrs. Philip Beekman.

Mrs. Wainwright P. Wemple of Lakewood, New Jersey, recently entertained at a dinner at her winter home in Beechwood, New Jersey, in honor of six nurses receiving their bachelor of science degrees from Columbia University, among them Misses Jessie W. Tyler, of Natchez. Mrs. Wemple was a former Natchez nurse.

L. Wallin, County Editor.

CLAIBORNE COUNTY.

Dr. D. M. Segrest, son of the late Dr. R. A. Segrest, Port Gibson, has located in the office of his late father for the practice of medicine.

Mrs. Chapman, wife of Dr. A. L. Chapman, Hermanville, died at her home following an illness of several months.

At the regular December meeting of the Claiborne County Medical Society, held at Port Gibson, there were present Drs. J. V. May, G. W. Acker, and D. M. Segrest. Officers for 1932 were elected as follows:

President—Dr. J. V. May, Port Gibson.

Vice-President—Dr. D. M. Segrest, Port Gibson.

Secretary and Treasurer—Dr. G. W Acker, Port Gibson.

Delegate to the Mississippi State Medical Association—Dr. J. V. May.

W. N. Jenkins, County Editor.

YAZOO COUNTY.

I am still confined to house most of the time, recovery very slow. Not much doing as the doctors all complaining of "hard times" and no money.

Dr. Gilruth Darrington and Dr. Joe Roberts made a flying trip to Vicksburg during the holidays.

C. M. Coker, County Editor.

JACKSON COUNTY.

The regular meeting of the staff of the Jackson County Hospital was held on January 4, at 7:30 p. m. Officers for the year of 1932 were elected as follows:

President—Dr. J. N. Rape.

Vice-President—Dr. S. B. McIlwain

Secretary—Dr. R. G. Lander.

Report of hospital activities for the month of December was read and discussed. A report of the most interesting cases and a round table discussion was the program of the meeting.

Other members of the staff present besides the officers elect were Drs. J. N. Lockard, J. N. Thrash, and C. H. Gray.

The next meeting will be held at 2 p. m. on February 1, to accommodate some of the members who are unable to attend the evening meeting.

A paper on undulant fever will be read at the next meeting and all present will be called upon for the discussion. Yours for a 100 per cent report for 1932.

S. B. McIlwain, County Editor.

DEATHS OF MISSISSIPPI PHYSICIANS—1931.

According to statistics furnished by Dr. F. J. Underwood, Executive Officer of the Mississippi State Board of Health, fifty-two Mississippi physicians died during the year of 1931. The average age at time of death for the fifty-one whose age was known, was 61. Deaths were distributed by decades as follows: 30 to 40 years, one; 40 to 50 years, 7; 50 to 60 years, 15; 60 to 70 years, 11; 70 to 80 years, 13; 80 to 85 years, 4. It will be seen with encouragement that all physicians do not die young. Diseases of the heart and blood vessels lead as causes of death, 22 or 45 per cent being attributed in whole or in part to such diseases. Four deaths were attributed directly to malignant disease, and malignancy was present as a contributing cause of death in two others, an incidence of nearly 12 per cent. Pneumonia caused six deaths. Nephritis was named but four times. Following is the list:

Adams, J. S., Sumrall; pneumonia, following accidental burns; Feb. 5; age 52.

Anderson, R. L., Inverness; lobar pneumonia, Friedreich's ataxia; May 31; age 56.

Ashford, J. A., Bolton; diabetes mellitus, senility; March 26; age 78.

Barlow, George W., Lake; arteriosclerosis, hypertension, paralysis; May 14; age 63.

Basinger, R. C., Jackson; cerebral hemorrhage; Jan. 31; age 31.

Bell, C. T., DeKalb; acute dilatation of heart; Jan. 26; age 52.

Blair, John A., Hattiesburg; cardio-hepatic-renal disease; Jan. 22; age 79.

Britt, James Boswell, Cotton Plant; angina pectoris; July 27; age 55.

Bufkin, C. L., Columbia; pellagra; June 5; age 58.

Catchings, Jas. M., Hazlehurst; coronary thrombosis; May 18; age 74.

Coker, D. W., Maud, R.F.D.; chronic interstitial nephritis, uremia; March 25; age 66.

Copeland, James, Tupelo; myocarditis, acute cardiac dilatation; August 2; age 72.

Crawley, J. T., Kosciusko; broncho-pneumonia, carcinoma of colon; November 26; age 78.

Davis, Wm. Little, Walls; myocarditis-muscular rheumatism; May 4; age 74.

Dickerson, Louis D., McComb; appendicitis acute, complications; June 4; age 62.

Dilworth, J. A., Aberdeen; acute dilatation of the heart, carcinoma of prostate; November 12; age 70.

Dorroh, Wm. G., Madison; cerebral apoplexy; February 5; age 60.

Duke, Wm. Tillman, Glen Allen; sudden death; July 23; age 41.

Eatherly, Wilson F., Winterville; diabetic coma, diabetes mellitus; July 7; age 74.

Gandy, Tillis, Royce; pneumonia; January 31; age 45.

Gill, W. Gregg, Newton; undulant fever; August 20; age 49.

Greer, L. L., McComb; appendicitis; July 11; age 50.

Hamilton, E. G., Greenwood; chronic myocarditis; April 26; age 50.

Henderson, J. W., Clarksdale; cardiac vascular disease, injury in auto accident; September 10; age 54.

Hughston, W. L., Ethel; leakage of the heart; February 27; age 63.

Hunter, Wm. Thomas, Decatur; hemiplegia apoplexy; June 2; age 59.

Jordan, Samuel M., Georgetown; gangrene; April 19; age 83.

Lamb, Daniel Reubin, Artesia; organic heart disease; May 25; age 51.

Martin, W. B., Indianola; sudden death presumably of heart failure; November 23; age 73.

Mason, Geo. David, Lumberton; pneumonia followed by encephalitis; April 26; age 43.

Maxwell, V. W., Gulfport; general peritonitis followed by appendectomy; June 26; age 40.

McHenry, Geo. Austin, McHenry; chronic interstitial nephritis; October 12.

McKinley, Russell, Columbus; broncho-pneumonia; January 4; age 58.

McRee, Francis V., Brookhaven; cancer of the face; July 17, age 80.

Norman, A. C.; Braxton; heart disease, hypertension, contributing cause, cirrhosis of liver; age 54.

O'Leary, John P., Vicksburg; abscess of lung bronchiestasis, chronic myocarditis; February 23; age 60.

Rowe, E. J., Hillsboro; apoplexy; January 7; age 69.

Rush, Jesse H., Meridian; chronic myocarditis; January 22; age 62.

Scruggs, S. A., Lauderdale; sudden death; June 4; age 77.

Segrest, R. R., Port Gibson; carcinoma of right lung; October 31; age 51.

Sims, J. B., Aberdeen; acute dilatation of heart, acute indigestion; May 10; age 70.

Smithson, W. W., Jackson; carcinoma of the liver and stomach, intestinal adhesions; September 9; age 56.

Stewart, Robert H., Poplarville; died following mastoid and sinus trouble operation; March 16; age 46.

Stone, G. C., Saltillo; syphilis of the brain; April 7; age 51.

Sykes, Wm. G., Aberdeen; senility, intestinal disturbance (diarrhea); January 18; age 85.

Vandiver, James Cox, Baldwyn; acute gall bladder; June 9; age 48.

Weissinger, W. S., Hernando; chronic myocarditis; April 13; age 83.

Westmoreland, G. M., Batesville; cancer of stomach; age 78.

Whitaker, Wm. Henry, Grenada; chronic nephritis, embolus followed by cerebral softening, cerebral embolus contributing cause; March 19; age 71.

Wiss, Rosa Douglas, Meridian; myxedema; September 14; age 63.

Woodruff, I. T., Batesville; pulmonary tuberculosis; July 11; age 60.

Woolsey, Reese S., McCalls Creek; cerebral hemorrhage, arterioschlerosis; February 2; age 60.

HONOR ROLL.

The following aided in the preparation of the Mississippi sections of our Journal this month. Your editors thank you. J. W. D. Dicks, John C. Culley, E. F. Howard, F. J. Underwood, D. W. Jones, L. L. Minor, W. H. Scudder, E. H. Jones, F. M. Acree, W. B. Dickins, G. S. Bryan, H. R. Fairfax, C. T. Burt, R. P. Donaldson, A. H. Little, T. L. Bennett, J. James, G. M. Barnes, William C. Walker, Mrs. M. H. Bell, Eliam B. Burns, L. Wallin, W. N. Jenkins, C. M. Coker, S. B. McIlwain, A. Street, J. A. K. Birchett, Jr., A. M. McCarthy.—28.

This month we carry county news items as follows: Adams, Choctaw, Claiborne, DeSoto, Humphreys, Issaquena, Jackson, Lauderdale, Leflore, Monroe, Pontotoc, Warren, Washington, and Yazoo—14. Where are the other counties of our State? Ask your county editor.

DR. THOMAS A. HEATH.

Dr. Thmas A. Heath, aged 77 years, of Shiloh, died at his home January 17. Dr. Heath had been a resident of Shiloh for the past 57 years and had practiced medicine in Issaquena County for the past 50 years. He is survived by his wife, one son, T. A. Heath, and six grandsons.

Dr. Heath was an honorary member of the Issaquena-Sharkey-Warren Counties Medical Society and of the Mississippi State Medical Association.

BOOK REVIEWS

Simplified Diabetic Management: By J. T. Beardwood, Jr., A. B., M. D., F. A. C. P. and H. T. Kelly, M. D., A. A. C. P. Philadelphia, J. B. Lippincott Co. 1931. pp. 185. Price, $1.50.

A readable manual devoted to general considerations of diagnosis and treatment. The charts for diet calculations are elaborated and worthwhile. Good tables of food values are presented. A most satisfactory list of specimen diets for diseases coexistent with diabetes is given.

I. L. ROBBINS, M. D.

Medical Psychology: By W. A. White. N. Y. Nervous and Mental Diseases Pub. Co. 1931. pp. 141. Price, $3.00.

A brief exposition of the mental factor in disease. The greater need of such study is emphasized, with a consideration of psychopathology and psychoanalysis. The conclusion is inevitable that the psychological factor in diagnosis and treatment is inescapable.

I. L. ROBBINS, M. D.

Health Protection for the Preschool Child: Committee on Medical Care for Children. Section I, Medical Service. The White House Conference on Child Health and Protection. New York, The Century Company, 1931. pp. 275. Price, $2.50.

This much looked for volume has arrived with the exhaustive array of actual information on our younger children which had been expected of it. Its auspices are authority enough to convince us that the scientific spirit underlies both the manner and conduct of the basic surveys and the interpretive analysis of the data.

Four important indices of child health activities were selected as best representing the current state of health protection for the preschool child: The Health Examination; Dental Health Examination; Vaccination against smallpox; and Immunization against Diphtheria. There is much illuminating data in the analytic comparison of these indices to one another in the same or different communities. It was a surprise to learn that in the average city 47 per cent of the preschool children had been taken to a doctor for no other reason than for a health examination while the appallingly low figure of 13 was given as the percentage of preschool children who had received protective vaccination against smallpox. Familiarity and contempt for old established practices would seem to be giving way to more recent development in preventive measures. Diphtheria immunization with 14 per cent has passed Smallpox vaccination.

Even one such fact should be material enough evidence upon which to create a nation-wide activity toward the protection of our children. The survey contains many more.

The reviewer believes that a little too much competetive spirit is shown in Part II which interprets its accompanying charts. The information given deals with the relative percentages and ratings of various cities and geographic areas in respect to the extent to which they have carried out the activities included in the four indices. The explanatory text is necessary and is simply presented, the only criticism being the creation in the reader's mind of an expectant waiting to see if his community is coming in first or last in the contest. It is likely that the compiler had not the least desire to create any such feeling and it is unfortunate that the occasional use of a phrase such as, "A Close Second," should encourage any such biased provincialism.

Part III contains in tabular form all of the information which any seeker after facts might wish regarding his own or another community in so far as these communities have been covered by the survey. Those interested in children's problems have in this and the succeeding Part IV a wealth of material and instruction upon which to base any community investigation in Child Health. The latter section appears to have omitted no details of technic on the conduct of a Health Survey and should prove of exceptional value to future workers.

Surveys of this type are in the ascendency and the one under review is no exception to the fact that they are so far fulfilling the important requisites of thoroughness and authority.

WM. GARVEY PERKINS, M. D.

The Matas Birthday Volume: A Collection of Surgical Essays Written in Honor of Rudolph Matas, New Orleans. New York, Paul B. Hoeber Co. 1931. pp. 396. Price, $10.00.

The Rudolph Matas Birthday Volume is indeed a fitting tribute to one who has done so much for the science of medicine and who has inspired and edified not only those with whom he has come in intimate contact, but also the entire medical profession by his numerous and valuable scientific contributions.

The "Appreciation" of Professor Matas, which can be easily recognized as the work of Dr. Isidore Cohn. contains quotations and reminiscences of the Chief, portraying his ability, genius, humanitarianism, and lovable personality.

Contained within the volume are four contributions on vascular lesions, which subject has interested Dr. Matas so keenly and to which he has contributed so much. Those by Mont Reid and Hubert Royster are especially appropriate, because they refer to principles which Dr. Matas has emphasized in his work on the treatment of aneurysms. Reid presents cases illustrating observations which were originally made by Dr. Matas

and which he has repeatedly emphasized in his scientific contributions. These are the advantages of the use of the metallic band in the treatment of aneurysm, the changes occurring in the heart as the result of arteriovenous aneudysm, vascular degeneration associated with arteriovenous aneurysm, and the marked collateral circulation which is present in cases of arteriovenous aneurysm. Royster reports two cases of arterial aneurysm in which a successful endo-aneurysmorrhaphy according to the technic of Dr. Matas was performed. Leriche in his contribution recommends the extirpation of the involved vessels in the treatment of localized obliteration of arteries. He presents both clinical and experimental observations supporting the value of such procedures and believes that the development of collaterals is thus favored, which, according to Leriche, is due to the part played by the sympathetic nerves. Alessandri discusses the value of various operative procedures used in the treatment of Raynaud's disease and thrombo-angiitis obliterans, emphasizing the importance of the resection of the cervical thoracic ganglia. A case of thrombo-angiitis obliterans successfully treated by this method is reported.

An excellent summary of the influence which William Stewart Halsted exerted on American surgery is presented by Joseph C. Bloodgood. Such a contribution is especially appropriate, because of the great admiration which Professors Matas and Halsted had for each other. Halsted's contribution to surgical technic and asepsis are summarized, as well as those which he made in the treatment of cancer of the breast, hernia, diseases of the intestine, biliary tract, appendix, vascular system, and thyroid.

A series of three articles pertaining to surgery of the intestinal tract are given by J. M. T. Finney, Senior and Junior, Robert C. Coffey, and E. Ribas y Ribas, of Barcelona, respectively. In the presentation of Dr. Finney's on hypertrophic tuberculosis of the ileum, a relatively rare lesion of a hypertrophic tuberculous lesion of the terminal ileum, is reported. In contrast to the usual tuberculomas in which the lesion is situated in the terminal ileum, cecum and ascending colan, the lesion in the case reported by Finney and Finney, was limited to the ileum. Extirpation of the diseased bowel was performed. One month later, however, there was recurrence of symptoms necessitating a second operation almost two months after the first. An additional resection of the terminal ileum which showed tuberculous involvement was performed, following which the patient made an uneventful recovery. Coffey presents the end results obtained by him in the treatment of cancer of the rectum and sigmoid. In 65 cases, there were 4 deaths, a mortality rate of 16.5 per cent. Of 21 traced cases, 13 (62 per cent) lived five years or more. A full and adequate description profusely illustrated of Coffey's technic of extirpation of the sigmoid is given. An unusual case is presented by Ribas y Ribas in which an almost complete extirpation of the jejunum and ileum was performed, because of an intestinal obstruction associated with volvulus. The resected portion of the intestine measured sixty centimeters instead of the usual length of from five to seven meters. This is due to the fact, according to Ribas, that apparently in the growth of the intestine, the external coat did not develop normally, whereas the internal and mucous layers continued their growth and development and obliterated the lumen of the gut. The patient made an uneventful recovery from the operation and was very much improved. However, diarrhea which was present after the operation continued after her discharge from the hospital. She continued to lose weight and five months after the operation died of cachexia from inanition.

Three papers an cancer are presented by Frederick J. Hoffman, Shelton J. Horsley, and John B. Deaver, respectively. That of Hoffman is a statistical one and concerns itself with cancer in the North American negro, a subject which has always interested Professor Matas. The study shows that there is an increasing mortality rate among the negro, which approaches that of the white race. The mortality rate of cancer of the genital organs was much higher in negro women than in white women. John B. Deaver, in his presentation on cancer of the breast, presents his end results obtained in 221 cases, of which 189 were traced. Of the 189 cases, 21 were living at the time of the study. There was a 2.7 per cent ten-year cure and an 8.9 per cent five-year cure.

Crile presents a resumé of the various anesthetics which have been used in recent years and stresses the importance of the role which Professor Matas played in developing especially spinal, local, and induction analgesias.

Paul Moura discusses the technic of total rhinoplasty favoring the Indian method, which consists in removing from the forehead a flap of skin and reconstructing the nose.

Joaquin Trais-Pujol describes a persistent fistula which followed marsupialization of a hydatid cyst. Persistence of such a fistula depends upon two causes, either the persistence of a hydrated cyst in the common biliary duct or communication between the cyst and a large biliary channel. In the former instance, treatment consists of evacuation of the cyst, whereas in the latter instance, the treatment consists of extirpation of the communication.

William J. Mayo emphasizes the importance of the special senses in the development of science. The indications and the operative procedure in splenectomy are stressed by David P. D. Wilkie, of Edinburgh. Splenectomy is indicated in cases of splenic anemia, hemolytic jaundice, and hemorrhagic purpura.

Contributions concerning thoracic surgery are given by Howard Lilienthal and Evarts Graham, respectively. Lilienthal, in discussing the operative treatment of pulmonary tuberculosis, stresses the importance of individualizing the therapy to the individual patient. The various operative procedures of pulmonary tuberculosis are discussed. The unreliability of many statistics concerning the end results obtained in the surgical treatment of pulmonary tuberculosis is emphasized. Evarts Graham discusses the associated reaction in the bronchial mucosa with infections of the upper respiratory tract. In a series of approximately fifty cases in which bronchial fistulae are present following cautery pneumectomy, it has been repeatedly demonstrated that infections of the upper respiratory tract after approximately twenty-four hours produce an intense reaction in the bronchial mucosa, and that as the infection of the upper respiratory tract is cleared, the bronchial mucosa infection also clears.

ALTON OCHSNER, M. D.

The Doctor and His Investments: By Merryle S. Rukeyser, B. Lit., M. A. Philadelphia, P. Blakiston's Son & Co., Inc. pp. 330. Price, $2.50.

Had you inherited a reasonable sense of financial values you would now probably not be a physician. A more lucrative field of effort would have attracted you. The business world rightly regards us as a profession of impractical idealists; otherwise, most medical advances would not have been made. The "feu sacré" that is so essential for even moderate medical success, usually unfits one for business.

The quality and quantity of medical service, as well as the worldly future of ourselves and our dependents, is depending more and more on the intelligent disposition of our earnings; and so, many physicians are being forced to study the A B C's of medical economics. The present volume outlines this subject in a very simple, practical and understanding manner.

Medical colleges in the past have given little thought to the financial side of practice, because those who discussed the subject usually tried to cheat the patient in one form or another. The present tendency is to avoid this very thing. Too much thought about business, however, will probably lower your medical ability; too little, may land you or your family in the poor house.

No saving, no investing! If you are unwilling to do without something that you want today in order to provide for tomorrow, you will probably never succeed financially. If you cannot save money on a $5,000 year income, you probably would do no better on $15,000, because expense usually increases faster than income. Regular saving, the author rightly believes, is the most certain, though possibly the most painful way of accumulating future wealth. This is best accomplished by a budget plan such as the author mentions. Do you know what proportion of your net income should be spent for living expense, how much insurance you should carry, and the amount you should save, as computed by those who have given the most thought to these subjects? Ye doctor and likewise ye family can read and re-read with profit, if not with pleasure, the budget plans presented.

Having saved a few dollars, the next and more difficult problem is how to keep them safe from those who sell rainbows and gold bricks, as well as from borrowing friends and relatives. In other words: "Give, but never lend," and, "Buy only what you know!" Money lending and speculation are distinct professions with which physicians should not compete. The rent value of a dollar with average safety is 6c per year. Your dollars are probably no more beautiful than anyone else's. Remember that every dollar should have a little dime not more often than once in eighteen months, lest it be a miscarriage.

The author suggests that you pledge budgeted savings, preferably through your banker, on the purchase of carefully planned securities. These should consist of the proper proportions of the highest grade bonds, preferred stock and common stock, representing fundamental types. It is thus possible to combine and balance maximum safety and greatest return during the entire business cycle. You will also force yourself to work and save, making speculative adventures impossible. Although the past several years have shown that the financial advice of bankers is far from infallible, it is much more reliable than the high pressure talk of stock salesmen.

Investment trusts in theory invest your money much more wisely than you. During the past several years, some have, but many have not. This subject is discussed at some length, but the author does not clearly explain how to select successful investment trusts from the investor's standpoint.

In the financial world everyone has something to sell. Caveat emptor. If you know nothing about investments, you must depend entirely upon the advice of someone who is apparently competent and who will not take an unfair advantage of your ignorance. Your banker or a financial diagnostician, of which several are mentioned, will probably best serve you. It is better, however, that you have even a slight understanding of the subject which can easily be gotten from this volume. Thus, you will not expect the impossible, nor will you be taken unawares by glib sales talks or other modern plans of exchanging your money for untried ideas.

If you are at heart a gambler and love taking risks, this book is not for you. It is written for those who are willing to deny themselves some of

the pleasures of today in order to provide for their unproductive days and for their dependents at a slow but steady pace augmented somewhat by compound interest.

Periodic financial examinations for physicians are probably as important as periodic health examinations. Do you know how much junk you have accumulated as investments? Do you know how much you are really worth today at a forced sale, and have you a definite plan for weathering the economic storm which is now all about us? This volume will unquestionably help you to understand these problems and many others of a similar nature.

The final chapters are devoted to real estate, home ownership, office equipment, medical arts buildings, and the pros and cons of medical groups.

The author's vast experience with this subject and his ability to express fundamental ideas simply and effectively, make this volume one that should be read and re-read by every physician.

CHAS. A. BAHN, M. D.

Pediatric Education: Report of the Subcommittee on Medical Education, Borden S. Veeder, Chairman, White House Conference, on Child Health and Protection. New York, Century Company. 1931. pp. 109.

This pamphlet contains the final report of the Subcommittee on Medical Education concerning the part which pediatric education should take in the curriculum of modern medical schools. The subcommittee, under Dr. Borden S. Veeder, Professor of Clinical Pediatrics, of Washington University School of Medicine, was composed of medical educators whose reputation as leaders in the teaching of pediatrics has long since been established by service in some of the leading medical schools of the United States. The conclusions were reached after comprehensive, statistical studies in every phase of the relation of pediatrics to undergraduate and post-graduate instruction. Information was obtained from the answers to a vast number of questionnaires sent to pediatrists, physicians especially interested in pediatrics, and professors of pediatrics in sixty-three medical schools.

In order that a concrete idea may be given of the scope of a pediatric course, the committee outlined, with the aid and criticism of many outside of its membership, the material which is essential in one way or another in the education of the physician to the end that he may be able to give an adequate care to the children under his charge. The outline of the course which the committee considers essential, together with the recommendations concerning the teaching staff, hospital and clinic facilities, and laboratories, may be regarded as one of the most important steps which has been made since pediatrics has been recognized and has attracted so many physicians to take it up. Statistics which have just been compiled by the American Medical Association show that 3,790 physicians limit their practice, or give special attention to pediatrics, as compared to 3,985 in internal medicine. This advance in the popularity of the subject has justified the organization of the American Academy of Pediatrics which will hold its second annual meeting in New Orleans during the meeting of the American Medical Association, in May, 1932.

To this group the efforts of this committee to stabilize pediatric education and the statistical studies which have led to their conclusions, will be received with no small amount of interest.

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